

## MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY

I.—OBSERVATIONS ON THE CASE OF SALLY  
BEAUCHAMP.

BY W. LESLIE MACKENZIE.

1. *Importance of the case.* When the Editor of MIND placed on me the responsibility of reading and discussing Dr. Morton Prince's *Dissociation of a Personality*,<sup>1</sup> I did not fully realise the peculiar nature of the case described or the magnitude of the issues already attached to the conclusions of the study. Even the reading of the book itself, which hitherto I had only glanced at in a bookseller's shop, tended to mislead one, for the tale was told with a romantic airiness and grace quite strange to clinical research. These 560 packed pages do not contain a dull sentence. Doubtless, the fascinating nature of the facts have much to do with the interest of the narrative, but one must recognise the entirely exceptional goodness of the mere composition,—the lightness of exposition, the masterly arrangement of the whole story. It is, I suppose, the completest thing of its kind in the English tongue, and, so far as a single case is concerned, probably in any European tongue. After the first feeling of romance had passed and I re-read more intensively, I began to understand why the book has produced such an effect. One almost wonders, however, whether such tremendous issues can properly be rested on a single case, however intensive the study of it has been. Thus

<sup>1</sup> The *Dissociation of a Personality*. A Biographical Study in Abnormal Psychology. By Morton Prince, M.D., Professor of Diseases of the Nervous System, Tufts College Medical School, etc. Longmans, Green & Co., 1906.

Dr. Schiller uses it to confound further his many monistic enemies, and offers to them in Miss Beauchamp a model for a "mad Absolute," but whereas Miss Beauchamp was cured by "the astute manipulations of Dr. Morton Prince," the Absolute, by definition, has no such hope of cure.<sup>1</sup> Prof. Taylor, too, in the recent discussion at the Aristotelian Society, suggested, obviously with Miss Beauchamp in his mind, that the relation of these multiple personalities to one another illustrates the relation of God to the other "persons" in the universe. "One might even venture to illustrate this point by reference to those well-known cases of multiple personality in which the so-called completest personality is aware of the character of one of the partial selves but dislikes and despises it. For here the acts and volitions of the secondary self seem to be directly known to the complete self, *without the intervention of any perceptive symbolism* and are yet not recognised as its own acts and volitions but as those of an inferior and hostile personality. I do not want to make too much of these unusual types of experience, but they do seem to suggest a possibility of understanding how God may be directly and immediately aware of my sinful emotions and volitions, and even how, as the theologians put it, these emotions and volitions could not exist at all apart from the *concursum ordinarius* of God, and yet may be experienced by God as being my volitions, etc., and not His own, and as something hateful to Him." I have italicised "without the intervention of any perceptive symbolism" because it is one of the most essential points in the whole record of this "dissociated personality". Prof. Taylor here returns Dr. Schiller's "mad absolute" with interest, but, however welcome his suggestion may be to the theologians, I am not sure that the limitation he places on God further on in the article will be equally welcome. This, in passing. Then, again, Dr. Schiller uses Miss Beauchamp to heap up the difficulties of Solipsism, as if that bone were not already contentious enough.<sup>2</sup> But his point seems to me a real one, and has probably had not a little to do with the difficulty of securing a serious discussion for those "split-off personalities". So long as the problem of solipsism concerned our traditional "selves," the difficulties have hitherto been enough to prevent any agreement among metaphysicians, even in expression; but if the "selves" are to be increased to an average of three a body, with hypnotic "states" thrown in, we shall be driven to

<sup>1</sup> *Journ. of Phil., Psych. and Scientific Methods*, iv., 1, p. 20.

<sup>2</sup> *MIND*, N.S., No. 70, p. 183.

specify how much of what goes under the name of "mind" is to be regarded as "self," or decide whether we should not try, as the telepathists seem to be trying, to discover a way out of our minds into the minds of others "without the intervention of any perceptive symbolism,"—so becoming like Sally with B I. and B IV.

These are enough to show how much is made to depend on this case, or rather on the type of investigation it represents. But I cannot resist adding one more reference. Dr. McDougall, in his discussion before the Psychical Research Society<sup>1</sup> goes almost the length of making Sally a crucial case to decide the truth or falsehood of monism,—including materialism, epiphenomenalism, psycho-physical parallelism,—as against dualism, in its two leading forms, first, where the "form of mental activity" is separated "from the content of the mind," the nervous system being responsible for "content," the psychic "being" for "form," and, second, where the "psyche" is responsible for everything and the body seems a curious superfluity.

I do not deny that Sally Beauchamp—the Mephistopheles of this strange group—is a most appropriate point of departure for a discussion of all the major problems of psychology and metaphysics, including theology, but where the details are so many and the difficulties of securing exactness so great, I can only hope to offer some observations mainly from the standpoint of psychology. Since the publication of this book, Dr. Morton Prince has published notes of some other allied cases and has discussed in considerable detail the whole theory of the "subconscious" and his own special views on it. With these discussions and this book we are pretty well in possession of his leading doctrines, which are in line with those of Janet, Freud, and other workers in this field. Of the present book of facts, let it be said that it has all the air of perfect good faith, not only on the part of the author, which goes without saying, but also on the part of the patient, who was able to bring a cultivated and interested mind—or minds—to bear on the observer's difficulties. At the time of writing the book, he had had the patient under observation for some six years or more. He "kept copious notes, often made daily, of the life of Miss Beauchamp. The evidence given by all three personalities, as well as by the hypnotic selves, has been laboriously recorded. Every piece of evidence which would throw light upon, substantiate, or discredit any alleged occurrence or mental phenomenon

<sup>1</sup> *Proc. S. P. R.*, pt. lii.

has been made use of. At all times, including intervals of enforced absence, as in the summer vacations, a considerable correspondence with each personality has been kept up" (p. 8). Nevertheless, a large amount of factual material must have escaped notice or record, and the frankness of Dr. Prince invites the most unsparing criticism of what is recorded. Personally, from the reading of Janet and others, I am rather inclined towards Dr. Prince's own theory of the case, but it is well to remember the caution given by Prof. A. H. Pierce,—"Not only is it true that many reporters of hysterical and other automatisms reveal an unwarranted artlessness in accepting their subjects' statements as scientific verities, they err also, I am convinced, in giving us only a fragment of the entire situation".<sup>1</sup> Dr. Prince is a skilled observer and no doubt allows for these organic tricks of the hysterical, but, in the nature of the investigation, it is hardly possible to record everything, and we must look to supplementary discussion and later verifications to elucidate difficulties, of which there are many. What is obvious to me is that we are not yet justified in making any more than provisional deductions from this case, and that the difficulties raised, for instance, by Dr. McDougall, are such as to call rather for more observation and experiment than for new application of speculative theories.

2. *What is a personality?* We are here concerned first to know what a "self" is to mean for the purpose of this research. Whether the "self" so understood will serve all purposes of the general psychological "self," the "self" used for discussions of metaphysical theory, is matter for argument. But what Dr. Prince means is this,—“I merely wish to point out in a general way that by a subconscious self I mean simply a limited second, co-existing, extra series of thoughts, feelings, sensations, etc., which are (largely) differentiated from those of the normal waking mind of the individual. In abnormal conditions these secondary ‘thoughts’ may be sufficiently organised to have a perception of personality, in which case they may be regarded as constituting a second self. Such a second self is not known to the waking self, which is not even conscious of its existence (excepting of course by inference from acts). B III.—Sally—was such a self. . . . In unstable natures the mind may be disintegrated in such a way as to produce a doubling or rather a multiplication of consciousness and to form two, three, or more

<sup>1</sup> *Journ. of Phil., Psych. and Scientific Methods*, v., 10, p. 268.



groups of subconscious states, which at times are capable of considerable independent activity. At times when excited they are capable of being stirred into fury, when they burst forth like a volcano, fermenting and boiling, in 'crises' of a pathological character. Such were the so-called 'demoniac possessions' of the middle ages and such are the hysterical crises of modern medicine" (p. 18). So far we are on familiar ground. Incidentally, we may say that Dr. Prince prefers the term "co-conscious" to the term "subconscious," because he maintains that there is evidence in Sally's and in other cases to prove that there may be two concurrent streams of consciousness, each unaware of the other, or one aware and the other not, but both acting much on the same materials of experience. Whether such a second consciousness is normal or only pathological is one of the points yet to be determined. In his articles in the *Journal of Abnormal Psychology*, Nos. iii., iv., v., he gives this general statement a wider sweep, resting his theory on the masses of familiar facts that prove the existence of lines of cleavage within the normal mind. For each person has many spheres of interest and each sphere develops its own system of thoughts, its own "complex". Normally, all these complexes are more or less closely associated,—"large associations bound together, memories of experiences in special fields of thought". But each complex "as a whole with its emotional tone is fairly well delimited from the other complexes".<sup>1</sup> When the person experiences any great shock, or great emotional disturbance, or violent stress from fatigue or exhaustion, dissociation, passing or permanent, may take place and the dissociation may follow the lines of cleavage roughly prepared by the relations of those apperceptive masses. All this is familiar to us from normal psychology. Every day brings proof of it in some degree. Whenever an experience passes out of the field of attention, it tends to sink below the level of the current consciousness, to become a "disposition" or, as Dr. Prince would say, a "dormant complex," and there it is apt to get beyond recall, except by special artifices, like hypnotism, automatic writing, where that occurs, or the hypnoid state (studied minutely by Dr. Boris Sidis<sup>2</sup>), or by dreams, or under the depressions or stimulants of fevers, or under stress of fear or other strong emotion; or, for no apparent reason, the experience will appear "long after". In this wide sense, we are all daily laying up the material of possible co-consciousnesses, possible selves, liable to come out

<sup>1</sup> *Journ. of Abnorm. Psych.*, iii., 4, p. 281.

<sup>2</sup> *Multiple Personality*, p. 327 et passim.

of their hiding when the upper levels of our common current consciousness get weakened. The current consciousness, the field of working attention, would then simply be the cutting edge of personality, the flowing point where the organism is adapted to its environment, the part of our remembered experiences that is kept burnished by use and organised for the daily practice of life. The materials unused at the moment are quite as real and are quite as legitimately included in our personality. Equally, so far as they cease to function with the current consciousness or cease to be capable of so functioning, they are to be regarded as either functionally dissociated masses or in a condition to become so, if the necessary stress should come. For the purposes of these studies, then, our current consciousness becomes the growing point of our experience, or the point of fresh adaptation to the environment. The particular metaphor does not matter. The important point is that each person, or personality, carries within him masses of living, dying and dead experiences,—dead, that is, in relation to any possible re-use of them for immediate life, but not necessarily beyond recall through the devices named. As bearing on the case of Sally, Dr. Prince's "chronological complex" is noteworthy. "In a general way events, as they are successively experienced, become associated so that experiences of an epoch tend to be conserved *en masse*. . . . This is an axiom of memory."<sup>1</sup> In dissociation "the cleavage of memory may be along chronological lines, that is to say, the amnesia embraces a certain epoch only. The newly integrated personality goes back to the period last remembered in which he believes, for the moment, he is still living, the memory of the succeeding last epoch being dissociated from the personal consciousness."<sup>2</sup>

Whether these selves or personalities resulting from dissociation, are on the same plane as the normal self is largely a matter of terminological convention. They fulfil all the ordinary tests for diagnosing a "self". But they are "inferior" (Prince) to normal selves; yet, in the present case, Miss Beauchamp, though she impressed her world as a capable growing self for six or more years, was all the time a quasi-somnambule personality. And Sally embodied so much of the memory of the other selves and of the whole experiences of the life lived in that body that Dr. McDougall<sup>3</sup> regards her as stronger in will and feeling and character generally than any alleged normal self obtained by re-synthesis of the group. Here I may say that I think the apparent

<sup>1</sup> *Journ. of Abnorm. Psychol.*, iii., 4, p. 284.

<sup>2</sup> *Ibid.*

<sup>3</sup> *Op. cit.*, p. 428.

strength of Sally is more or less illusory. It was in the Sally "phase" of the drama that most of the past experiences came to life and use. No doubt if she was actually a separate person, not really of the same order of personality at all as the others, she was stronger, but I hope to give reasons for believing, with Dr. Prince, that she was of the same kith and kin as the others, a product of dissociation. The special point about all these minor or major selves is that several may exist in the same body. The history of their formation is somewhat different from the history of the formation of the normal self, which is the product of a whole life up to the given moment, but as much a projected growth, a construct, as they.<sup>1</sup> Those selves have memory and the power of recognition. These are two essentials.<sup>2</sup> That the one brain should lend itself to the formation of several selves of this order is not more mysterious than it should retain traces of experiences now forgotten and not used by the current consciousness, but capable of recall under the proper stimulus. There are large masses of the brain that are probably lying fallow or resting. It may be, as Dr. McDougall points out, that this is somewhat difficult to account for from the standpoint of evolution; but it seems to be the fact none the less and is a variation of the first importance for the survival of man. We are not to gauge the mental capacity or the nervous capacity of man or animal by the small range of experiences open to our observation.

Whether we are to count any of the "Sally" selves as normal or not, we may accept Dr. Prince's statement about the normal self: "A normal self must be able to adjust itself physiologically to its environment, otherwise all sorts of perverted re-actions of the body arise,—anæsthesia, instability, neurasthenic symptoms, etc.,—along with the psychological stigmata,—amnesia, suggestibility, etc.,—and it becomes a sick self. Common experience shows that, philosophise as you will, there is an empirical self which may be designated the real normal self. However, I shall put aside this question for the present and assume that there is a normal self, a particular Miss Beauchamp, who is physiologically as well as psychologically best adapted to any environment" (p. 233).

3. *What is dissociation?* From the quotations given, Dr. Prince's general view of psychological dissociation may be inferred. An excellent statement is given on page 3. There are various ways of figuring the mechanism of dissociation.

<sup>1</sup> Stout, *Manual of Psych.*, ii., c. vii.

<sup>2</sup> Höfding, *Outlines of Psychology*, p. 139.

One of the best is Dr. McDougall's in his articles on the "Physiological Factors of the Attention Process": "We have only to suppose that the paths which connect some group of upper level systems with the rest of the neural systems of the brain have their resting resistance so raised as to render impossible the drainage of energy from the one group to the other. The systems of one group, while remaining in the relation of reciprocal inhibition to one another, then cease to have this relation to those of the other group, and it becomes possible for any two systems belonging to the two different groups to be simultaneously active, *i.e.*, there are in one brain the neural conditions of two streams of presentations passing through two foci of consciousness."<sup>1</sup> It is right to add that Dr. McDougall himself does not consider either the current theory, or this specialisation of it "altogether satisfactory, because it assumes that the essential condition of the unity of individual consciousness is the spatial continuity of neural substance and neural process,"<sup>2</sup> and he finds it difficult to accept this assumption. Meanwhile, his statement makes the provisional hypothesis of functional dissociation of nervous groupings or constellations definitely conceivable as a possible occurrence in the brain. The abnormal selves would be a special case of an innumerable multitude of graded cases, which may range from the momentary forgetting of a word to the highly stable and complex personalities evoked in Miss Beauchamp. How the inhibition is operated by the varying resistances of the synapses between related groups of neurones is a matter of detail. From the standpoint of the clinical observer, who is dealing with a flesh and blood body that thinks, "the current explanation of such cases, which has been approved by so high an authority as Prof. Stout,"<sup>3</sup> is certainly effective and he will not readily give it up so long as treatment based on it succeeds. Dr. Boris Sidis presents the same facts in terms of "moments consciousness" and the rising and falling of threshold values of constellations of neurones.<sup>4</sup> M. Pierre Janet's statements of the theory and his numerous illustrations are too well known to need more than a reference. How the allied doctrine of "dispositions" can be applied critically is well seen in Prof. Stout's criticism of Myers in the *Hibbert Journal*, ii., 1. How it is applied as a method of mental analysis is illustrated in Dr. Münsterberg's *Psychology and Crime*.

<sup>1</sup> MIND, N.S., xv., p. 355, and *Brit. Journ. of Psych.*, i., pt. iii.

<sup>2</sup> *Ibid.*

<sup>3</sup> *Ibid.*

<sup>4</sup> *Op. cit.*

4. *History of Miss Beauchamp.* Dr. Prince has not dealt fully with the disease aspects of the case in this volume. But in part iii., vol. ii., "the neurasthenic state, including the relation of changes in physical health to psychic states, will be considered" (p. 23). No doubt many facts of importance will be forthcoming. Meanwhile, what we get of the personal history of the patient is briefly this: "The little that is known of her heredity from a neuropathic point of view is suggestive of nervous instability" (p. 11). The grandfather was said to have had a violent temper and to have been wanting in self-control. The father was the same. Of the mother nothing is said except that she was very repressive of the daughter. But the married life was unhappy. In the child-life of Miss Beauchamp, we find records of day-dreaming, morbid reticence, supersensitiveness about duty to her mother, easy fatigue, somnambulism, headaches, nightmares. "When she was thirteen, her mother died. This was a great shock to her mental system, and for a number of weeks she was probably half delirious, or, as we would now interpret it, disintegrated. The three years following her mother's death, when she lived with her father, were a period of successive mental shocks, nervous strains and frights" (p. 12). The details for good reasons cannot be given. "It is unlikely that even a strong constitution would withstand the continuous nervous strain and depressing emotional influences to which her whole childhood was subjected. At sixteen she ran away from home and thus ended this hysterogenic period. At a later period anxieties of another kind succeeded those of her youth. In Miss Beauchamp's heredity and childhood, then, we find ample to account for the psychopathic soil which has permitted her present condition" (p. 13). There is a further history of trance-like states and somnambulism. As a child, she "took everything intensely. . . . She saw people through her own ideas, which dominated her judgment and which tended to be insistent. Even as a child she appeared to have hallucinations, or at any rate so mixed up her day-dreaming and imaginings with reality that she did not have a true conception of her environment" (p. 13). In 1893, when she was eighteen, she had another grave nervous shock, which is the shock associated with the special development that ultimately brought her into the hands of Dr. Prince.

These facts are of the very greatest importance from the psychological standpoint; for they make it quite clear that we are here dealing with an extreme condition, where dissociation occurs on the slightest provocation, where every

experience is exaggerated, where we have the natural phenomena following from a perverted and repeatedly disturbed nervous growth,—the stigmata, at least the mental stigmata, of hysteria, and occasionally the physical too, extreme suggestibility, aboulia, etc. These classes of facts have been made only too familiar to us by M. Pierre Janet. The girl was obviously abnormal from the cradle. She was all her life receiving shock after shock and suffering more every time. I emphasise this early history, because it probably contains the true beginnings of Sally, who is the chief puzzle and the independent, or almost independent, variable of the group. All three personalities seem to me to be the end-products of a long history. As we see them first, they come to us almost fully developed. But surely here if anywhere the becoming is as important as the being. In most of the comments I have seen on the case, the personalities are looked at backwards as from the adult standpoint. They ought also to be looked at forwards from the infantile standpoint. For instance, one possible criticism of the finally re-integrated Miss Beauchamp, namely, that she is not a normal person after all, or not *the* normal person, may be met in part at least by the contention that, with such a personal history as is here displayed, there never was from infancy a normal Miss Beauchamp and never could be. What Dr. Prince has made of the "broken lights" of that unhappy, elusive personality is probably the best that could be made, but, even so, her normality is a normality relatively to her own history, not relatively to the ordinary stable person's nervous system. When the instability even of a healthy infant is aggravated by the conditions of stress here depicted, the nervous system hardly gets a chance to become fully integrated. Further, the different stadia of "chronological shocks" must have resulted in endless minor dissociations, which would give more and more materials for fresh integrations. That Dr. Prince should have been able, with exhaustless patience and skill, to bring order out of this flowing chaos of experiences is one of the greatest recorded triumphs of psycho-therapeutics. There is probably a great deal still to cure or to restore, but probably also much that can never be restored. Functional paralysis begun in infancy and confirmed by adult experience is not a good case for the physician, and a mind broken and fragmented functionally as this was is justifiably regarded as a sort of prolonged functional paralysis of the brain-systems. The "stigmata" are only another name for the same fact.

5. *The three persons and the evolution of Sally.* Miss Beauchamp (B I.), student, came to Dr. Prince. She was hypno-

tised. In the hypnotic state (B II.) she remembered her waking experiences. But on awaking, she had complete amnesia for her hypnotic state. This is the usual phenomenon. Later, in the hypnotic state—which, on this occasion, seems to have been a deeper state of trance than the first (p. 30)—the subject spoke of her waking state as *She*, the third person. Acting on the hint, Dr. Prince ultimately found that this was another personality altogether (B III.). B III. came and went. Apparently, at first she did not appear until the hypnotic state was deeper than at the first sitting, and then she claimed not to be asleep at all, but to be awake! “In contrast with this attitude of B II., the second hypnotic self, who was correspondingly named B III.—Sally—refused from the very first to accept the idea of being asleep or being Miss Beauchamp asleep” (p. 29). Here is the beginning of many puzzling situations. This B III. claimed to be a separate person awake, yet she was really known to be, to all appearance, another person asleep. Ultimately, she became Sally Beauchamp, but there were several stages in her unveiling. She claimed an intimate knowledge of all that happened in the mind of Miss Beauchamp—B I. At first her eyes were kept closed during the hypnotic state that revealed her, yet she claimed to be awake. She was not able, however, to open her eyes. Her claim to be awake, therefore, was probably in part at least a delusion. Later, she insisted on getting her eyes opened and then apparently she completed her individuality and was able at once to re-act on the environment like a normal person. She seemed to have some power over Miss Beauchamp, B I., and ultimately she acquired the power to knock her about as and when—or almost as and when—she (Sally) chose to “come”. Later still, another person—B IV.—appeared. Their relations to each other may be briefly indicated by the statement that B I. and B IV. were mutually amnesic, and amnesic also of Sally (B III.), while Sally was, at least at the date of discovery, familiar with some or all of B I.’s experiences, but not at first with B IV.’s and only doubtfully later. This suggests at once that Sally’s knowledge of B I.’s inner mind was acquired indirectly, not by direct intuition—“without the intervention of any perceptive symbolism”. And there is a good deal of evidence tending to confirm this. As this is a cardinal point in the whole case, I deal with it below. So far, the analysis.

Of synthesis, it is enough to say that, ultimately, B I. and B IV. both disappeared and the Real Miss Beauchamp came, with the memories of both B I. and B IV., who, however,



when they reappeared on break-down of the Real Miss Beauchamp, showed amnesia for her. Sally vanished when the Real Miss Beauchamp came and also reappeared when there was break-down. She claimed to be the same relatively to the Real Miss Beauchamp as she had been to B I., but not very clearly to B IV., namely, a persistent co-consciousness, with her own parallel experiences and her knowledge of the other mind "on inner lines". But whether Sally still exists as a real co-consciousness during the presence of the Real Miss Beauchamp, there has hitherto been no means of verifying; because all stigmata of hysteria are absent, no automatic writing is possible and no independent presence in the hypnotic state can be established. Sally has been "squeezed" out of existence to all appearance, but whether she is a factor in the new synthesis or remains as a "dormant complex," a "disposition," irrecoverable by the ordinary processes of the current consciousness of the Real Miss Beauchamp, remains still a doubt. She gives no proof of her presence whatever. That she did co-exist with the Real Miss Beauchamp rests simply on her word when the Real Miss Beauchamp is once more resolved temporarily into her old trio. On the supposition that Sally is an early off-split, if she be such an off-split at all, or a growth from an infantile rudiment, there is nothing surprising in her disappearance, or in her apparent dormancy, or in her belief that she co-existed with the Real Miss Beauchamp. If, however, on the break-up of the Real Miss Beauchamp, her experiences, or part of them, were projected as Sally, Sally's belief that she had co-existed would be the same as if she really had co-existed. As Dr. Prince says, the conditions of amnesia and memory are very subtle and the variety of possible illusion in such a subject is infinite. If Sally is not a dormant part of the Real Miss Beauchamp, how does she come when the Real Miss Beauchamp goes, and why does she give no sign while the Real Miss Beauchamp remains? She may very well be the unconscious basis of all the personalities, but now functioning as an element, not as a principal. It is certainly a point to be further investigated why the Real Miss Beauchamp knows nothing "of Sally, her life and her doings . . . except indirectly. Of this part of her mental life she has no more memory than has B I. and B IV." (p. 525). But it is far from certain that the disconnexion of B I., B IV. and Sally was absolute.

Let us characterise Sally's evolution a little more in detail.

(A) If there be anything in the theory that mental complexes formed under stress of emotion persist longest con-

sciously or subconsciously, it is reasonable to infer that, when under stress of great emotion, dissociation takes place in early adolescence, the split-off complex will retain the characters of the adolescent life. Sally may be regarded as such a "chronological complex". She represents a time of life when emotion is very great and most unstable; when acquisitions are most vivid; when the disregard of conventions is greatest, because conventions are not yet fully established in consciousness; when aggressiveness is the predominant attitude; when curiosity is greatest; when, in a word, the whole person is trembling on the verge of great experiences, and demanding ever more and more of them. It would, therefore, naturally follow that, if such a complex could function by itself, it would show greater apparent initiative, greater individuality, greater persistence, greater want of control. And this is what Sally shows. Her apparent independence, her capacity to dominate the others, resembles in so many minor points the impact of the aggressive younger sister on her older sisters, that little more seems necessary to account for her on-goings. There is much general, but little detailed evidence that different shocks resulting in dissociation took place at different ages and the split-off consciousness would naturally take the emotional tone belonging to the periods. In Sally, the intellectual emotions predominate; altruism has not yet claimed its share in her feelings. She is the thoughtless, mischievous, unsympathetic girl, but never normal. In the others, B I. and B IV., we have later aspects of character, the older sisters' contempt for the spoilt child, the richer emotions of the grown woman. But the fact that, in varying circumstances, the three aspects each made themselves manifest in the re-integrated personality tends to show that Sally was of the same kin as the others and that her claims to uniqueness, though strong, were not overwhelming. That the amnesia between her and her alternatives did not cut both ways is not by any means a unique fact. Dr. Boris Sidis maintains that, had the hypnoid state, not the hypnotic state, been used, the dissociated trio would have come sooner into one,—as in the Hanna and other cases. He appears to have detected nothing unique in Sally.

Whether by illusion of memory or by fact, Sally claims to be contemporary with the very early stages of Miss Beauchamp's personality, if she be not indeed a parallel development of the oldest part of Miss Beauchamp's experience. It is certain that Sally did not come into full existence all at once. Until the time that she forced open B. II.'s eyes, she was scarcely even a semi-independent person. Even then,

she is speaking the language that Miss Beauchamp had learnt in her early days ; she is working on the experiences of the same childhood ; she is revolting against some, rejoicing in others, and behaving generally as the arrested or perverted development of Miss Beauchamp's childhood or early adolescence. The readiness to "take to" Jones also points to the probability that Sally represents an incipient stage of that attraction and, to that extent, is one with B I. and IV. Meanwhile, the later personalities have become organised and for the time have overlaid the older. In the ordinary intercourse of life, the relatively childish complex named Sally was of little use, having been superseded by the necessities of adult livelihood. But when the nervous system became further disintegrated, the submerged Sally grew relatively more active, and, on being subjected to the further dissociation due to the hypnotic state, Sally emerged as the more active and in some respects more developed personality.

What makes the problem of Sally much more difficult to place properly is that we come upon her very late in her history. She springs upon the stage apparently from nowhere and forthwith becomes the star. But this is illusory. In the course of the corporate life of all the personalities, there were many shocks resulting in greater or less nervous disintegration. We need not assume that Sally was separated once for all and then grew at once as a parasitic personality. There is evidence to show that she, like the others, grew more and more distinct as the shocks were repeated. And it is probable that, like the other personalities, she has been partly revealed indeed by hypnotic processes, but, like them, has also been partly made by the processes that revealed her. Her education probably dated from long before the great shock and went on lines of its own. She had not learned French or shorthand, and, in spite of her claim to read directly all that B I. has in her mind, she can neither speak the French B I. speaks nor write the shorthand she writes.

(B) *Sally's claim to run from infancy.* "According to Sally's memory, the separation began somewhere about the period when the child was learning to walk, whatever that age might have been" (p. 393). But Sally has no idea of time or age (p. 393). This claim, then, cannot be taken as if it were verified. It is not in itself absurd or preposterous, but the belief in its accuracy might very easily arise from later experiences, as normally happens with our beliefs about our own early days. There is no reason why, given the necessary conditions, the "dispositions" of infancy should not survive into adult life and receive articulate expression, even if they

were dispositions formed by the *hearing* of words rather than by their use. But the occurrence is in the last degree unlikely and in Sally's case we cannot deny the claim, but we can rest nothing substantial on it. As to her memory, Dr. Prince says that "it must be open to tricks and hallucinations, like the memory of ordinary people" (p. 394). In the case of a person that, at one stage of her adult life, showed some ten or twelve disintegrated "personalities," some greater, some less and all passing from one to another with the most bewildering rapidity (chap. xxix.), this reserve is absolutely essential. The marvel is that there should be any certain fact of an introspective kind to record. It is scarcely out of this atmosphere that we can expect to take assertions of personalities at face value. "Sally, indeed, thinks she can remember events in her life dating back to a time before there was a separation of consciousness and which she places in infancy. But the date is an inference and the facts of perception, like that of her cradle, she could well have acquired and probably did acquire at a later date. . . . But a memory going back to infancy is without doubt an hallucination similar to what many people have" (p. 394). Yet Sally makes these claims with the same conviction as she does her claim to direct intuitional knowledge of B I. and B IV. At a number of places in this kaleidoscopic record, I have had the uncomfortable feeling that Sally was self-deluded. But Dr. Prince is inclined to accept the claim that the "doubling of consciousness" goes back as far as the time of learning to walk. But he doubts the claim that a subconscious personality had developed at that early period. He suggests rather that "the present subconsciousness—Sally—remembers a number of isolated subconscious perceptions and feelings which, as subconscious phenomena, were more or less normal. Remembering them, now, they seem to be her own personal experiences," as with hypnotic memory of "isolated absent-minded perceptions". . . . "Indeed, this is just what occurs with those perceptions which make up the fringe of our ordinary conscious attention. This fringe we are only half aware of or not at all, but in hypnosis the hypnotic self remembers it as its own conscious experience. I have made numerous experiments proving this, and have shown that when all the personalities are synthesised into one, there is a wide fringe of this kind in Miss Beauchamp's case" (p. 395). This seems to me good reasoning, and, if we apply it to Sally's claim to direct intuition into the other minds, we shall find that, in some instances at least, the claim is illusory. It suggests the same sort of intui-

tional insight as we have into the doings of the hallucinatory self of our dreams, when we see ourselves "out there," engaged in a hundred varieties of experience and activity, yet seeming to ourselves to know precisely and intuitionally all the time what the hallucinational self is thinking and feeling. The vision that B I. had of Sally smoking the cigarette is clearly of this type of illusion, which Lemaître calls "auto-scopie hallucination". I have had the experience in dreams hundreds of times, and I am satisfied that a good deal of the apparently stable observation of Sally is of the same fragile build. Probably, as Dr. Prince suggests, Sally "as at present organised, may now synthesise the memories of normal subconscious states belonging to childhood, and remembering them as the experience of her own personality, seem to herself to have lived as a whole in the past". Yet he admits that it is difficult to reconcile this with Sally's clear distinction of the normal subconscious states of childhood from her own thoughts. He finds difficulty in accepting the claims without more positive proof and is unwilling to believe that the whole memory is pure hallucination.<sup>1</sup> We are here landed obviously at a point where more investigation is the only right demand and where no inference of a metaphysical kind can be made, except provisionally.

(C) With this general caution, we may now turn back to some minor examples.

(1) Sally's claim to direct knowledge of B I.'s mind can be largely explained on the "attention fringe" theory. If she existed as a co-consciousness, she would have experiences parallel to B I. Having, then, acquired her knowledge of the same experiences at the same time as B I., she naturally believed that she was seeing into B I.'s mind by direct intuition, when in reality, by the same sense, she received her parallel share of the same impressions and, from subsequent experience, inferred the rest. It is significant that, with French, she claimed to see into B I.'s mind, but says that she attended only occasionally. It is legitimate to suggest that her theory of non-attention is merely her hypothesis

<sup>1</sup> Dr. Boris Sidis in *Multiple Personality*, p. 386, suggests a mechanism for the transference of memories *as such* from one "personality" to another: "The functioning constellations of neurons, having the secondary state as their concomitant, are able also to awaken in the constellations of neurons, having as concomitant the primary state, those neural conditions the correlatives of which are memory-experiences, and are transmitted as such by association-paths to the secondary constellation. The secondary moment then remembers that the experiences happened not within its own past, but within the past of the other, of the primary moment."

to explain why her acquisition had not passed a certain point.

It does not, therefore, seem absolutely necessary to assume direct intuition. Further, it is on record that Sally did not from the very first see into B I.'s mind any more than she did into B IV.'s. The illusion, if it be an illusion, was a gradual growth.

(2) P. 37. A post-hypnotic suggestion, given to Sally, is carried out by B I. or B II. This shows that probably the integration of Sally in her final form was not yet complete. Sally played the same part as the hypnotic self, or was not a waking person at any time and, accordingly, could not, in her own person, carry out a suggestion.

Later, B I. sees herself in the crystal smoking a cigarette (p. 55). This seems to indicate that Sally is as yet no more than the recoverable fringe of perceptive experience. It was before the eyes were opened and before she had attained to the independent unknown quantity that so blocked the way to re-integration. B I. must have somehow had the experience of the cigarette smoking. Otherwise, how could she have seen it in the crystal? It is a puzzle, however, to understand how she saw herself in the semblance of Sally, since it was the fact that, while the cigarette was being smoked, Sally's eyes were still closed. Where could she have had the vision of herself smoking the cigarette on the sofa? The only suggestive point was the bitter taste in the mouth, and that she believed to be quinine, not tobacco. And at this stage Sally herself could not have had the vision of herself smoking the cigarette. It seems to follow that, whatever be the full explanation, the imagination of Sally and B I. had, at this stage, much the same content and included the same recoverable fringe of experience. The two persons were not sharply marked off. One seemed much like an illusion to the other. Although B I.'s amnesia was formally complete<sup>1</sup> for Sally, yet in substance it was not; for B I. did have the same experience as Sally and in the crystal vision recalled it. It is a matter of convention whether we are to say that B I. "remembered" the state because she did not instantly recognise the state as having been hers. We might as well disown every written word we have forgotten instead of setting ourselves to build it once more into our mental furnishings when it is proved to be ours. It is not correct to say that the amnesia between B I. and Sally was at this time complete except as to the power of recognition. But, if this be so,

<sup>1</sup> By "formally complete" I mean that B I. would not recognise as her own any experience of Sally's.

then Sally was of the same kith and kin as B I. and, therefore, of the same kith and kin as all the others, but differing in detail, in fullness of knowledge, in activity, in memory and so on. The differences are differences in degree, not in kind.

(3) P. 48. "Chris's claim meant a parallelism of thought." At this time Sally (Chris) "had not independent existence, except in my presence". But, as we have seen, the same experience would provide the presentations for both Sally and B I. The parallelism of thought was probably an illusion resulting from this. So far as the thought was parallel, it might have been due to parallel experience. So far as it seemed to be intuitional, it was probably an illusion. The problem, therefore, is not to account for direct intuition into B I.'s mind, but to account for this illusion.

(4) P. 47. "She always spoke as if she had her own thoughts, perceptions and will during the time that Miss Beauchamp (B I.) was in existence." How much was clever invention and guess-work during the alternation of personalities? B I. learned to guess a great deal when she knew that she could not know directly what had occurred in her trances. Sally may have done the same.

(5) Pp. 61-62. Relation between Miss Beauchamp's thoughts and her compulsory "automatic" language, as well as the relations between Chris's thoughts and speech centres. "Did Chris (Sally) directly make use of the speech centres and do her lying directly? And, if so, what were Miss Beauchamp's thoughts at the time? Or, did Chris (Sally) do it by influencing Miss Beauchamp's thoughts so that the latter did the lying directly?"

Chris's (Sally's) own hypothesis was that she did the talking and Miss Beauchamp thought the things she (Chris) said. Dr. Prince interprets this as meaning that the actual speaking "arouses in B I. the correlated thoughts which were identical with, or part of those of, the subconscious mind". "The correlated emotion" seems to have been incorporated along with the thoughts. All this shows that the mental content of B I. and III. (Sally) had much in common. The episode suggests the very common insane delusion of hearing "voices" when the "voices" are made by the hearer's own lips. Here again the problem is to account for an illusion—probably affecting both personalities.

(6) P. 91. Why should the opening of Sally's eyes be such an important departure in her experience? It seems to have marked the definite establishment of her as a distinct personality. But before the opening of her eyes, she claimed



to be conscious of all that passed in B I.'s mind. This implies that she saw the things that B I. saw. If she was only a "hypnotic state," a "deeper trance," this is what we should expect. Why should the opening of her eyes, therefore, be such a source of new experience? How could she have had B I.'s experience if she had never seen as Sally?

Are we to suppose that B I. in the hypnotic state was incapable of fresh experience for the moment and, as it were, in a condition of mental stasis? When the eyes are opened in this state, therefore, the result is not an increase of experience by the hypnotised subject, but a transformation of the personality and a defining of the experience of Sally. This would be a parallel to Dr. Boris Sidis's hypnoidal state. It looks as if the condition necessary for freeing Sally from the inactive limited life she led was the hypnotising of B I.<sup>1</sup> It is difficult, however, to say precisely what occurred when the eyes were opened,—whether it was the disappearance of the hypnotic state of B I. or the transference of it to a new state of somnambulism, which was Sally.

In an unstable condition, it appears, the opening of the eyes is peculiarly liable to end in the establishment of a separate personality. But up to this time, the relation of B I. to Sally could not be strictly called amnesia. B I. failed to recognise certain experiences as her own; but she was willing to accept them when proved to have been hers. This is simply a failure of recognition.

(7) P. 96. When Sally established herself distinctly, "the thought came to her that perhaps Miss Beauchamp might be dead and would never come back; perhaps she could not bring her back".

But if, as Sally claimed, she knew what Miss Beauchamp was thinking both in sleep and in waking, why should she have any doubt about her condition now? It seems that, when the alternative personality was established, her direct knowledge of B I.'s mind ceased. It was only while as yet she was a sub-consciousness, a sharer in B I.'s experiences, that she knew what B I.'s knowledge was.

This difference confirms the impression that her direct knowledge of B I.'s mind was an illusion. It was more like the apparently direct knowledge of other minds in dreams, which are after all only a muddled reproduction of objective experiences, not a direct insight into the subject's mind.

If this be so, it simplifies the case to a certain extent. It

<sup>1</sup> But see "Conclusion".

is easier to understand the exclusion of mind by mind than the direct (telepathic) knowledge of mind by mind.

Even the method taken by Sally to waken up B I., namely, burning her with a cigarette, still further confirms the view, first, that on the establishment of the alternative personality, any direct knowledge certainly disappeared, and, second, that the apparently direct knowledge in the other state was an illusion.

Why on the establishment of alternative personality should Sally suddenly have ceased to be conscious of B I.'s experience? Up till now she appears to have known all that was passing in B I.'s mind and in the mind of B II.,—that is B I. both in the waking and in the hypnotic state. Now she suddenly ceased to be conscious of any such knowledge. Probably, the functional dissociation of the Sally group and the B I. group was now completed. It reverted frequently.

Later on, we have somewhat of the same experience when B IV. is revealed. At first, Sally knew nothing of her ideas or history; but gradually acquired a knowledge of both. This, however, was by indirect observation and inference, not by direct knowledge of B IV.'s mind. This tends to show that, equally in the case of B I., her knowledge, though seemingly direct, was really indirect.

(8) P. 98. The coming of Sally, once the process was established, seemed to depend on the condition of B I.'s health and "particularly upon a condition of fatigue, which was necessary. The better Miss Beauchamp's health, the more deeply and strongly was Sally imprisoned."

Here once more Sally seemed to have acted as a subconsciousness to the normal Miss Beauchamp; but there is nothing to show that when Sally was fully present as an alternative personality, B I. acted as subconsciousness to her. On the contrary, B I.'s amnesia (formal) was always complete; Sally's never.

But the question arises, was Sally really present always or was her conviction of her being so an illusion? She had no sense of time. She knew no difference between ten minutes and ten months. This points to the idea that, for varying periods she was absent altogether, but never knew when. Probably, she was re-established afterwards when B I. was hypnotised; but it would be very difficult to prove that she had been present at all the experiences of all the intervals when B I. was fully herself.

(9) P. 100. When did Sally sleep, if ever? Did her sleep correspond with the dreamless periods of B I.'s sleep? She

declares that she was conscious of the periods of B I.'s dreams.

P. 153. Dr. Prince thinks that Sally's claim "never to sleep" is an illusion. Probably, her accounts of the others' dreams were equally illusory. She probably had the dreams herself and assigned them to the others.

(10) P. 106. "The hand-writing alone was hers."

Hand-writing is a very delicate test of the grade of education. Here we find Sally writing precisely the same hand as Miss Beauchamp. Distinction is impossible. How is this to be accounted for if Sally is entirely independent? Does it not once more point to the presence of an illusion? Sally's belief in her own independence seems to be a mis-interpretation on her part.

(11) P. 107. "Did nothing worse than stutter." This was one of the "irresistible impulses".

B I. learned this fact from one of her letters to herself (p. 108). Here we seem to have a ravelling of personalities. Sally's claim to have *produced* the stutter was probably as much after-the-fact as the common "voices" delusion. The stutter came first; the illusion afterwards.

(12) P. 114. "The co-existence of a subconscious sane mind with a delirious mind." This might be taken as showing that Sally was an entirely different order of mind. But another view is possible. The alternation of delirious and sane periods might have been interpreted as simply a lull in the delirium, a not uncommon phenomenon. Frequently, in typhus fever, I have seen a delirious person stop his muttering and answer with perfect sanity when firmly addressed. When the stimulus of questioning ceased, the delirium began again. It is easy enough to suppose that, in the lucid intervals, an illusion is generated regarding the delirious intervals. The person may seem to recall the whole that has occurred and have the firm conviction that he does so, just as nobody is so convinced of not having been asleep as the man suddenly and completely roused from deep sleep. In *delirium tremens*, again, we have a type of delirium where frequently the patient may have crowds of hallucinations and, at the same time, remember them all and preserve perfect sanity all through. Delirium varies so much in different intoxications that one cannot speak of every variety in the same terms. But this relative sanity of Sally does not seem to me a crucial proof that she was not herself a product of dissociation. The difference in stability, temper, education, etc., between the two personalities would certainly affect their behaviour in fever, as it does in chloroform narcosis.

(13) P. 126. The letter-writing of Sally to the others is worthy itself of some explanation. If she knew B I.'s mind directly, why did she write? If she could affect B I.'s mind directly by suggestion, why did she take the more round-about method? The need for writing seems to confirm the view that her intuitive knowledge of B I.'s mind, when finally dissociated from her own, was an illusion.

(14) P. 132. "My attendant demon is too much for me and destroys faster than I can write." Apparently, Sally must have been asleep sometimes, or out of existence, or she must have been more readily provoked by some things than by others. If she was, as she claimed, persistently co-conscious, she would have known directly all that the writer was writing even before it was written, as she sometimes anticipated what was to be spoken by B I. The claim to co-consciousness, even after full establishment, is open to the same criticism as Dr. Prince makes of the claim to co-consciousness back through the whole life to childhood.

(15) P. 135. B I. was subject to indefinable fears, and on one occasion the fear emerged in connexion with the breaking of a promise. "In a vague way, Miss Beauchamp was conscious of Sally's enjoyment of the situation." Apparently, the emotion, welling up from the subconscious, carried with it some reference to Sally, this known disturber of the peace. While there was formal amnesia for ideas, there was not the same for emotions. This also brings B I. and Sally more into line. There is here a clear sign of reciprocal knowledge of some sort, or rather interpenetration of experiences.

(16) P. 139. It is found that Sally could be controlled by hypnotism. "Suggestions to Sally influenced the waking self the same as if given to B II. This showed the relationship between the two groups of conscious states (personalities) in spite of their apparent disunion."

This confirms the view expressed that the two supposed personalities are really phases or rather fragments of a single mind—Sally emerging only in the "deeper trance".

(17) P. 438. For a long time Sally was not able to become conscious of B IV.'s thoughts. But (p. 438) she learnt to become conscious of them. But this only "as a result of an effort of will and a certain process she had to go through, and then only at certain times when IV. was in a perturbed condition of mind, which, however, Sally could encourage by inducing hallucinations". Sally gave her "suggestions internally," winding up with "I shall know everything you are thinking".

It is open here to suppose that Sally's apparent knowledge

of B IV. was merely the repetition of her own suggestions to B IV. The apparent knowledge may have been an illusion on Sally's part. There does not seem at any time to have been the free internal knowledge of IV. that seemed to mark Sally's later knowledge of B I. But it does seem from many indications that, whether she was conscious of B IV.'s consciousness or not, she knew when the change from B IV. to B I., or *vice versa*, took place, and gradually built up the system of knowledge that might be called an "internal" knowledge of B IV., or rather an illusional schema of B IV.'s internal knowledge, or, possibly, it was simply Sally's own knowledge assigned to B IV.

Dr. Prince admits (p. 442) that "The synthesising of B IV.'s consciousness with that of the subconsciousness (Sally) has more of a biographical than scientific interest, as it was not open to experimental corroboration". If Sally described the facts as she saw them, was it all a hallucination of memory on her part? But B IV. testified to the accuracy of the statements regarding her own thoughts. On the whole, he thinks Sally's claim to the knowledge of B IV. justified. Personally, I think this point wants further research. If any part of Sally's alleged intuitive knowledge while she remains a separate person can be accounted for without assuming direct intuition, the presumption is that similar explanations can be found for it all. It is always possible to say that the dissociation from time to time ceased and the personalities became synthesised and thus got knowledge of each other's ideas. The one-sided amnesia would be still unaccounted for, but this is not an insuperable difficulty. Before we assume direct intuitive knowledge of distinct persons, with all that the assumption implies, it is surely worth exhausting other explanations. If we knew all the clinical conditions, the evanescent hypnoid states, the sub-waking transit-states from waking life to sleeping and reversely, we might possibly catch the various personalities out or see some of them flowing together in momentary synthesis and lapsing again. This is very different from the trans-subjective insight involved in the other assumption. I do not say that the temporary synthesis, the restoration of nervous union, *explains* anything; but at least it does not create a new problem.

(18) P. 386. "Mamma was very ill for a long time before she died, and from this time C did all sorts of absurd things, so that I did not know for a long time what she was thinking about. No, she was not at all like B IV., but she had dulness of hearing and sight very like brain fever. The doctor said

she was threatened with brain fever. She was not real, you know ; not herself."

This seems like a suggestion that Sally's knowledge even of C (B I.) was not so complete as she herself imagined. It was rather a series of inferences than of trans-subjective intuitions. Sally may have been the embodiment of earlier memories broken off from present experience. The apparent insight is only illusion. This cannot be the whole fact ; because Sally is capable of the present experience of B I. as well ; but apparently it is hers at second-hand. She seems to take over from the other personalities all that they do and adopts it as her mental furnishing. The point to account for is why she imagined herself a separate person all along and not a particular group of ideas in the general stream.

(19) P. 243. B IV. was able by fixing her mind to recover some knowledge of her amnesic periods. She did in fact induce a state of abstraction, a "hypnoid" state. She was able by this method to recover knowledge of B I.'s actions, but not of Sally's. "There never has been any evidence that Sally's memories were the source of B IV.'s 'mind fixing' or 'scrappy' memories.<sup>1</sup> If this had been the case, it is inconceivable that the regained memories should not have included some of Sally's own experiences as well as those of B I. This was never the case. B IV. never recalled any facts by these processes other than those of B I.'s life, never one of Sally's" (p. 264). "This," as Dr. Prince says, "is a curious and interesting fact ;" but it does not prove that Sally was irrecoverable by B IV. For "with true visions it was different. By this method she (B IV.) occasionally got at Sally's experiences. For instance, she once saw herself (in a vision) as Sally driving in a carriage with a friend. The reason for this difference is not entirely clear, but the facts corresponded with certain results obtained by myself experimentally" (p. 264).

Here we have, as in B I.'s "cigarette" vision, another instance of the projected-self, or "autoscopie" hallucination so common in dreams. And Sally, in both cases, was the "form" of the projection. Yet Sally had never been seen by B I., and only in the mirror by B IV., who was surprised by her own peculiar expression, which was Sally's expression. That the projection should take the form of Sally in both

<sup>1</sup> These 'scrappy' memories, or 'memory-flashes,' are very often referred to and afford further evidence, first, for questioning the complete independence of Sally, and, second, for regarding her as of the same mental origin as the others, but more dissociated from B I. and B IV. than they were from each other.

cases seems to show that the relation between Sally and the others was much more intimate than the records superficially indicate. In fact, it looks as if each self was capable of projecting itself in the form of the others, a sort of power of reciprocal "autoscopy" hallucination. But even this is rather too definite; for we are steadily asked to contemplate well-defined personalities, with individual names. But, in chapter xxix., we are introduced to quite a crowd of "personalities," more or less evanescent and identifiable as coherent unities only with much difficulty. They would hardly "stay to be counted". Possibly, there was disintegration and re-integration, and the fragments of new personalities may have clung to the greater masses.<sup>1</sup> But the result is rather to cloud our minds with a doubt whether we can accept the "unities" named "Sally" and "B I." and "B IV." as anything but provisional formulæ for experience-masses not completely analysed or fathomed. There are indications that "Sally" is not always the same "Sally". Dr. Prince's knowledge of her personal expression must have been profound; but there is much that personal "expression" does not express, and, as many of Sally's "experiences" were probably adopted illusions, changing as the other personalities changed, we may be assigning to Sally an illegitimate wealth of mental experiences of every kind. Dr. Prince indicates this possibility in her alleged memories of infancy. I have given some grounds for extending the criticism to her alleged "intuitional" knowledge of the other personalities. Indeed, one may legitimately suggest a deeper doubt. Sally's way of "knocking about" B I. and, to a less extent, B IV., and her evident belief in the reality of her powers to do so, as well as to see into their minds, looks very like the common convictions of some delusional maniacs, who claim a preternatural insight into other minds, hear voices, "know" what the owners of the voices mean, and believe themselves able to dominate and direct without "the intervention of any perceptive symbolism". Further analysis of the facts is needed to persuade me that a large part of Sally's experiences do not belong to this order. For instance, her anticipation of what B I. was to say *just before* she says it, seems to me an instance of the "voices" delusion from "whispering," the "whispering" in this case being rather suggested by the incipient than by the fully developed action of the vocal organs.

<sup>1</sup> These personalities were adult infants, as it were, who were given no time to establish a recognitive memory. They were a sort of delirium, Sally being the person that had them as hallucinations. They made no protest against "death".



6. *Dr. McDougall's criticisms.* Dr. McDougall's fascinating paper, already mentioned, contains many propositions that I should like to discuss and had marked for discussion; but I have already exceeded reasonable limits and his paper would need a separate discussion. My effort has been to frame an estimate of the nature of the facts; the metaphysical implications must depend on the view we take of these facts, and I find my view differing in many important particulars from Dr. McDougall's. Briefly, I do not find in the whole case such material as would crucially determine my final view on parallelism, or interaction, or the separable "psyche," even if this case were supplemented by many others of the kind.

7. *Conclusion,—provisional view of the nature of Sally.* With Dr. McDougall, I doubt whether the Real Miss Beauchamp is after all anything but a real Miss Beauchamp, if by "real" we mean the original personality that began when the body common to them all was conceived. I doubt if any "Miss Beauchamp" was ever more than an incipient personality. The whole mental growth seems to have been blurred and confused, at least from infancy. Possibly, some of the brain-systems were functionally unassociated from the outset, so resembling (functionally) the probable condition in certain kinds of congenital imbecility. If this was so, then there was no "normal" or "real" Miss Beauchamp ever possible; the best adapted self would survive, and the best adapted is, in our society, the most stable. Out of the emerging, sprouting, but imperfectly related systems of an idiot's brain you cannot make much that is worth calling "normal" or "real," and, if Sally's systems were in infancy prevented from functionally "associating," the "real Miss Beauchamp" will be whatever fits best the uses of life, that is what secures the best health and the fewest stigmata. In this sense, Dr. Prince's "real Miss Beauchamp" is as "real" as any possible "Miss Beauchamp". It may, without inconsistency, be admitted that Sally seems—I emphasise seems, for the sands are very shifting—seems to have much of the "original" energy, the adventure, curiosity, activity, that normally precede the life-actions imposed by custom and conventional ethics. She is, as here presented, a woman of initiative and synthetic energies. Relatively, B I. and B IV., not to speak of the ten or twelve minors, are passive. Yet even B I. had the resistance of inertia, a relative stability; she went on for at least six known years as a student, and she had more acquisitive power in some fields than Sally. Then B IV. fought for her rights, and, on the whole, conquered. Sally's great apparent wealth of mind is capable of an explanation that

does not involve the assumption that she is more "original" than the others except in the sense that her main "strain" was of earlier origin than theirs, or seemed to carry with it more ancient elements. But, as a fact, we do not have much detail of the "childhood" of B I. and B IV. Neither do we know very closely when each became capable of using the "common paths" (Sherrington's term) in the brain,—the paths of eye, ear, muscle, etc. And how the common organic sensations were allocated is very imperfectly told us here, but may be told hereafter. How far toxic stimulation played a part we do not know; yet, if it could be shown that alimentary or other toxins coincided with certain phases, we should have better grounds for determining whether the claimed powers of Sally over the others was not of the nature of the powers of the "man" in Rasselas over the elements. Any one that has argued with delusional lunatics will be very sceptical of the "powers" claimed.

But the actual investigation gives us data for another view, which seems to me to synthesise many of the facts, if not perhaps all. The view is this: Sally is first revealed as a "hypnotic state" (p. 28), a "second hypnotic self". But she claimed *not* to be asleep; she "refused from the very first to accept the idea of being asleep" (p. 29). But, as a fact, she was, relatively at least to B I. and even to B II., "asleep". "She goes into an apparently deeper trance" (p. 30). She thus comes to *her* claimed "waking state" by "passing into a deeper trance". This is a paradox. But the "deeper trance" is a kind of fact common among P. Janet's cases. For instance, Lucie I., II., etc., were "deeper trances". Now, either Sally was really a "deeper trance," or she was, by nature, whatever her first origin, a personality marked by the suggestibility of the "deeper trance" state. To say that she was "suggestible" looks like flying in the face of all the recorded facts. But "suggestion" is very wide in its forms. To a very highly "hysterical" person, as Sally's "deeper trance" state was, everything that occurs to her is "suggestion," in the sense that she at once takes other people's thoughts and ideas and believes them to be her own, originating with herself. She is built up out of the ideas she thus comes by and believes to be her own. In this she but repeats the common experience in post-hypnotic suggestion, when the subject in the waking state has the firm belief that the "suggestion" comes from himself. The same fact is abundantly common in every one's experience. In Sally's experience, it is the main fact. She thinks she even knows things beforehand when she obviously does not. Her ideas

on "psychology" are probably the clever, unconscious plagiarist's use of Dr. Prince's ideas, gleaned in a hundred interviews. She imagines it is all her own, like all egotists, who, even when sane, often show the ingenuity of genius in finding their own thoughts in other men's mind and words. Their incubation period for assimilation is so short and the egotistic apperceptions so strong, that the origin of an idea is always assigned to themselves, never to another. They get a rude awakening now and again. Sally is never awakened in this sense, if, indeed, she ever was a "waking state" at all. There is a record of her eyes being opened in the trance state, but none, so far as I remember, of her being awakened, *as herself, from the trance state*. It is a tenable theory that she *was* essentially a trance state unawakened and that her annexing of ideas from the others was the clever work of the highly hysterical egotist, to whose mill everything was grist. She is full of illusions of memory and illusions of "intuition,"—forms of suggestion arising out of trifles. She has immense cleverness in "fishing and guessing". All the personalities seem to have had the same. She is full of "autoscopie" hallucinations. She has delusions of "power". She claims to be the primary agent in many mischievous actions of the others. But their "irresistible impulses" were probably due to other causes, and, when the impulses were developed, or about to be developed, Sally at once had the conviction that, like the fly on the wheel, she was the active person.<sup>1</sup> She can at once convert a hint into a certainty. Her "telepathy," her intuition, is an "after-the-fact" telepathy, an "after-the-fact" intuition. Her claimed co-consciousness may be real, because she is served by the same organs as the ordinary consciousness, and, given dissociation, this co-consciousness is enough to account for all her illusions of intuition and control. When we find her "in bed" after having apparently produced a whole family of dissociated states, she is repentant for what *she* claims to have done.

To my mind, therefore, the most probable view is that "Sally" was either the main mental system of a profoundly hysterical person ready to develop illusions, or delusions, out of everything, or a "hypnotic state" unawakened, and having all the same mental qualities. When the "real" Miss Beauchamp was formed, Sally "goes back to where she came from,"—a pathetic euphemism. Probably, it is nearer the truth to say that, in going away, she "awoke" from her "deeper trance" and that she no longer wears into a state

<sup>1</sup> Sally is full of "irresistible impulses" herself, but she does not claim to cause them herself.

of super-suggestibility and delirium the new, if not the real, Miss Beauchamp. That the new Miss Beauchamp does not remember Sally's experiences as such is no proof that Sally's experiences are not playing a part in some other form or lying dormant as dispositions or traces that support the whole psycho-physical life and may yet emerge if occasion should require. The same brain-systems cannot be always functioning in every direction at once, and we have, as yet, no method of testing what the "resting state" of the nervous system really implies. Anyhow, the primary paradox to resolve seems to me this—that a person known to be asleep claims to be awake without going through the process of awakening.

We shall await with interest the fuller history promised, and, then, perhaps, it will be possible for the psychologists to prepare a real case for submission to a conference of metaphysicians. Till then, we are free to "speculate," as Dr. McDougall suggests, and I offer my "speculation" among the others.

## II.—THE PRESENT PHASE OF 'IDEALIST' PHILOSOPHY.

BY F. C. S. SCHILLER.

It is possible that amid the clamour of new realisms Mr. Bradley's articles do not continue to attract as much attention as formerly; but every real student of philosophy will admit that they form as good a guide as ever to whatever thought goes on in the 'idealist' camp, and that the philosophic views they present are as various, fascinating and puzzling as ever, and cry aloud for a philosophic interpreter. The present phase of Mr. Bradley and the modifications which stress of circumstances has imported into the old body of 'idealist' doctrine are best studied in the articles published in Nos. 71 and 72 of *MIND*.

The first thing that strikes one is the great contrast which exists between them. Almost the whole argumentation of that in No. 71 seems so clearly, intelligently and decisively pragmatic that it might have been written by any pragmatist.<sup>1</sup> But the apparent reconversion of Mr. Bradley to Bradleyism in No. 72 suffices to show that this interpretation would have been a mistake, and would have failed to do justice to the complexity of Mr. Bradley's philosophic personality. The pragmatist side in his multiple personality had happened to come uppermost, but my former diagnosis of his philosophy as a 'chimerical' combination of absolutism, scepticism and pragmatism still held true.<sup>2</sup> In the privacy of Mr. Bradley's soul these discrepant elements doubtless all live happily and harmoniously together, but as the outside observer cannot place himself in the central point of vision where the kaleidoscopic patterns delight the eye, and can see only the clashing bits of glass, their public performances present as pretty and instructive a problem in the detection of their coherence as any philosophic analyst could desire.

<sup>1</sup> The last paragraph but one and a couple of (purely nominal) allusions to Hegel in footnotes must be excepted.

<sup>2</sup> πρόσθε λέων, ὅπιθεν δὲ δράκων, μέση δὲ χίμαιρα (cf. *MIND*, N.S., No. 67, pp. 382-383).

From this point of view the article on Coherence and Contradiction in No. 72 is probably the most illuminating and important that he, or any member of his school, has ever written. For it is by far the frankest in its self-revelation, and for the first time allows us a real insight into the source of his philosophic embarrassments and into the causes of the resulting chaos. Nowhere else has he been so candid, clear and free from the pose of immeasurable superiority to his subject and all who cannot see eye to eye with him. And as candour, clarity and contrition are not as common virtues as might be desired, Mr. Bradley is now setting an excellent example to his school.

In particular I would single out for comment six points of first-class importance.

I. Mr. Bradley for the first time makes clear what he meant by affirming, on the one hand, that truth is ultimately definable in terms of satisfaction, and yet denying that *all* satisfactions have relevance to the question of truth. He mitigates the apparently gross inconsequence of this doctrine by trying to explain his conception of the 'satisfaction of the intellect'; and though it may still be disputed whether his reply is relevant to the issue raised by logical psychologism and can really be thought out, one can now at least understand how Mr. Bradley seeks to reconcile his two positions.

It appears from pages 489-490 that though the criterion of truth is satisfaction, truth is a *special* kind of satisfaction and able to oppose itself to others. And philosophy (by definition) seeks to satisfy this special craving for truth. It is inferred (*a priori* and without appeal to fact) that no *other* way of seeking satisfaction can claim truth. Ideas may indeed be suggested by other wants, and they may work and satisfy us as men; but to say that "whatever the intellect may say or feel about these ideas, they are all none the less true, is ruinous theoretically" (p. 490). It reduces philosophy to a collection of useful ideas, and this is to annihilate it. But though the other human needs have no vote in the world of intellect, they may have a voice. Like Suffragettes, they may clamour, and assail the ears of their lord and master. They may humbly plead—"Are you in fact satisfied with yourself as long as we remain unsatisfied?" And a conscientious and good-natured intellect may thereupon be worried, without derogating from the purity of his principles. For he will be worried 'theoretically'.

Hence Mr. Bradley can in a sense "philosophise with his whole nature"—though not "directly"—without impairing

the supremacy of "the intellect". For his 'intellect' may ask, "how far, in order to satisfy itself, must its ideas satisfy all our needs?" (p. 491).

Let it not hastily be inferred, however, that any need of our nature satisfied in idea is truth; nor yet be objected that the intellect is taken to be "something apart working by itself". It is only maintained that in it "we have a specific function, as such verifiable in experience, and claiming to possess special rights of its own" (p. 491).

This account of the relation of the intellect to satisfaction should undoubtedly afford much satisfaction to its critics. For it is not only far clearer than any previous intellectualist pronouncement as to the nature of 'intellect,' but it makes very handsome concessions to the critics of 'the intellect'. If any one had been willing to say as much at the outset it is probable that the controversy about intellectualism would never have grown so bitter; it is hard to believe therefore that any intellectualist was willing to allow so much truth to anti-intellectualism. But it does not follow that Mr. Bradley's concessions will now satisfy his critics, or lead them to withdraw the charges of (a) verbalism and (b) abstractness.

(a) For what does the doctrine of the *special nature* of the intellect really mean in concrete fact? What more does it mean than that we have special terms 'true' and 'false'? It throws no light on their use and on the conflicts and ambiguities which may arise in the course thereof.<sup>1</sup> Empirical observation is needed for this purpose. It shows also that there are other similar terms, 'good' and 'bad,' 'good' and 'evil,' 'right' and 'wrong,' 'beautiful' and 'ugly'. These are all terms expressive of valuations (a philosophic subject Mr. Bradley continues strangely to neglect), and therefore *generically* akin. Consequently it is hard to see why their specific differences should constitute impassable gulfs between their spheres of application, or why the mere fact that we sometimes have to choose between alternatives one of which strikes us particularly as 'true' and the other as 'good,' should prohibit us from recognising the kinship of the two cases. In point of fact neither human practice nor human language recognises such taboos. In actual use it frequently happens that the terms of one kind are transferred from their usual sphere of application to another. It also appears to be a psychological fact that high degrees of emotional im-

<sup>1</sup> It is clear, e.g., that when Mr. Bradley says that no truth is wholly true, and that yet one may be truer than another, he is (p. 499) using the term in (at least) two senses.



pressiveness, whether æsthetic, religious or moral, do actually claim the *specific* truth-value. How far such claims are logically valid may be disputed, but they are at any rate worth noting and examining. Mr. Bradley's doctrine would prohibit all such inquiries. Does he hope to forbid us henceforth to distinguish between 'good' arguments and 'bad,' to speak of 'true art' and 'false friends,' because the specific terms of logic have been employed in an æsthetic or ethical sense? Surely there cannot be such magic in these 'special' words that they should be able to dis sever the unity of the soul into radically disparate departments? After all Mr. Bradley's distinctions are only matters of language, and when fairly appealed to language<sup>1</sup> decisively declares against him. As for the conflicts between the good and the true and the beautiful, they cannot be held to prove a fundamental incompatibility of temper between them, so long as *inter se* the sciences are allowed to take discrepant views of the same subjects, and nothing is more familiar than conflicts between opposed and discordant 'truths'.

(b) Verbalism is the usual nemesis of abstractness, *i.e.* of false abstraction, and of abstractness also Mr. Bradley's doctrine may be convicted in several places.

(1) It is false abstraction to conceive 'ideas' as intrinsically 'true' apart from their use, and the verification or rejection this entails. For it is an attempt to find the *movement* of cognition in a mere cross-section of the process. It means that truth-claim is confused with real truth (an old and persistent mistake of intellectualists), and truth is conceived to inhere in the mere form of assertion. In real life of course this is never done. Hence a philosophy which prides itself on making this abstraction at once becomes a vain beating of the air in order to bottle the ghost of the living intellect in the empty forms of potential thought.

(2) 'Truth' is a false abstraction so soon as it is taken apart from the processes by which truth-claims are actually tested. The only way, therefore, of vindicating special rights for 'the intellect' is, not by pointing to the fact that it *claims* them, but by showing that it can make *good* its claim, *i.e.* showing that to concede them would be for the good of man as a whole.

(3) The 'intellect' is a false abstraction, so soon as it is taken in abstraction from the rest of human nature. Mr. Bradley's disclaimer (p. 491) fails to show that he has not done this. It is plain that by 'the intellect' he does not

<sup>1</sup> Including his own, *v. infra*, p. 35 note 2.

mean the concrete mind, because if he had meant this he could not have failed to observe that it nowhere stands in the systematic opposition to the will and feelings which he insists on. In all its acts it seems to be pervaded and affected by the non-intellectual processes with which it is interwoven, and it is a psychological impossibility to treat it apart from these. It is only by an artificial and arbitrary *tour de force* of abstraction that the biological unity of human action can be broken up, and the 'intellect' can be sufficiently alienated from life to be put into antithesis to the similar abstractions called 'will' and 'feeling'. And it is only the inveterateness of this abstraction that has hitherto blinded philosophers to the futility of the whole procedure. For if ever either 'will' or 'intellect' could be thought as *existing* in 'pure' (and therefore vicious) abstraction, it would *ipso facto* become unintelligible how they could influence each other or constitute a single soul. If then it is 'philosophical' to misconstrue 'intellect' in this way, all we can say is that 'intellect' becomes meaningless if taken 'philosophically,' and philosophy becomes meaningless if it is devoted to the study of such intellect. But willy-nilly we philosophise with the whole of our nature—in the *only* sense in which either we or intellect or philosophy exist at all, *i.e.* as concrete things and *not* as abstractions.

II. The article in No. 72 shows that Mr. Bradley was not after all equal to the heroic step of discarding as unmeaning the absolutist theory of knowledge and so of escaping from the scepticism in which that theory inevitably ends, as the readers of No. 71 had begun to hope. For there his feet seemed to be resolutely travelling on a better way. He had seen apparently that the search for 'independent' facts and infallible truths<sup>1</sup> was vain, because "when you have descended below the level of error you find yourself below the level of any fact or any truth you can use" (p. 331). He had recognised that 'facts' are made, and the latinity of his term 'construction' had only thinly veiled this recognition<sup>2</sup> (p. 332). He had commented on the futility of insisting on the 'objectivity' of perception so long as no criterion had been found to discriminate 'perception' from 'hallucination' (p.

<sup>1</sup> Contrast the argument of his article in N.S., No. 66, pp. 153-161.

<sup>2</sup> It is astonishing what an inexpressible crime a mere translation into Anglo-Saxon seems to be in intellectualist opinion. There is far more insight in the cynic who sums up the philosophic situation in the epigram: "Axioms are postulates, validity is strength, to verify is to make true—the disputes of philosophers are merely verbal".

332). He had criticised the 'foundation' metaphor in knowledge (p. 335), showing that 'a foundation used at the beginning does not mean something fundamental at the end' (p. 336), and urging that knowledge grows solid by the confirming and rejecting of provisional assumptions in their working. He had seemed to see the essential part played in this process by the recognition of error (p. 335). Nay, he seemed even to have caught a glimpse of the all-important truth that the cosmos of knowledge is created not by the indiscriminate inclusion of everything presented, but by selection.<sup>1</sup> Absolute certainty, based on an all-embracing world-order, had been explicitly sublimated into an unattainable ideal, and we had been frankly told to content ourselves with relative probability (p. 336). Lastly, it had been laid down that the question whether any particular claimant to 'fact' was to be judged real or not depended on the *convenience* of the alternatives relatively to the world-order as it existed in our thought, and that it was always a question of "successful contribution" (p. 338), and of what was *better or worse* for it (p. 337).<sup>2</sup> Nay, Mr. Bradley had finally conceded that 'facts' (and, if so, why not *a fortiori* inferences from them?) were always tinged with personality, and that the validity of a fact of observation "is due to such and such a person perceiving it under such and such conditions" (p. 336, *s.f.*).

Now all this was most excellent pragmatism and a great advance on all Mr. Bradley's earlier efforts in this direction.<sup>3</sup>

But the article in No. 72 presents the appearance of a complete transformation and a relapse into the old absolutism, in some ways more reactionary than the position in N.S., No. 62, in which the belief in the reality of the Absolute was first disclaimed.<sup>4</sup> All the old crags, rendered unap-

<sup>1</sup> "It is agreed that if I am to have an orderly world I cannot possibly accept all the facts. Some of these must be relegated, as they are, to the world of error, whether we succeed or fail in modifying and correcting them. And the view which I advocate takes them all as in principle fallible" (p. 335). Contrast No. 66, p. 153: "our last judgment, and that is our present judgment, must be taken or rather must be treated, as infallible".

<sup>2</sup> A very flagrant case of Mr. Bradley's own disregard for the 'special sense' of the logical predicates, and a very sensible intrusion of the 'ethical' (or rather teleological) predicates. Cf. another on p. 338: "by any other method the result is *worse*, therefore for me these principles are *true*". Italics mine.

<sup>3</sup> For a full discussion of these see my paper on 'Is Mr. Bradley becoming a Pragmatist?' in N.S., No. 67.

<sup>4</sup> Cf. my discussion, in N.S., No. 63, on 'Mr. Bradley's Theory of Truth'.

proachable by the constant falls of the rotten rock, reappear to view. Somewhere in their midst we find Mr. Bradley, dodging the stone-falls and desperately clinging to the treacherous support of all his old principles.

Things are for ever passing into their 'others' by a fatality no human wisdom can control, hoping (but *failing*) thereby to express a meaning which can never be *theirs*, because it *must* be a monopoly of the *whole*. Despite (or perhaps by reason of) this "visible internal self-transcendence" (a strangely contradictory metaphor!), it is the duty of the philosopher to insist that the *universe* must *not* contradict itself and to take upon himself the responsibility for all the contradictions that *appear* to flourish in it.<sup>1</sup>

All the resources of thought, however, are impotent to grasp this Protean Real. All judgment refers to reality, but qualifies it unsuccessfully. It is eternally condemned by its very form to cut to pieces the living whole it is trying to re-construct. It predicates *a* of *R* and *b* of *R* unconditionally (p. 495), and then remorsefully observes that *R* is more than *a* or *b* or any set of predicates. At last it realises that its assertions can never be true, because *R* is everything. Thus all judgment is condemned to the Sisyphean and self-contradictory task of trying to include all reality in a single affirmation (which if successful would be a tautology), and yet knowing that its very distinction of subject and predicate compels it to dis sever the unity of the reality it is suicidally trying to express.

Of course it follows that "every partial truth is but partly true, and its opposite also has truth". And all truths *are* partial; "the ideas which we are compelled to use are all in varying degrees imperfect, and the truth is nowhere absolute" (p. 499). Philosophy and life fall hopelessly asunder, but neither party can take steps towards a reconciliation. Philosophic truth is useless, and what alone is useful is unphilosophic (pp. 501-502).

In other words, Mr. Bradley now points to the ultimate disintegration of the absolutist scheme of thought as unequivocally as Mr. Joachim himself, who first tried to open the eyes of the 'soft idealists' to the perils of their position. Yet Mr. Bradley will not abandon it. There is no sign that it has ever occurred to him that if the nature of the universe and that of thought are both such as he describes, they are

<sup>1</sup> It is strange that Mr. Bradley does not draw the obvious conclusion that a view which thus takes *appearance* (of contradiction) for reality must therefore itself be illusion, and prefers as of yore to do lip-service to the claims of Hegelism.

thoroughly unfitted for each other, and that no more final refutation of the principle of contradiction could be imagined than the results he deduces from its application to the universe. Yet no search for another way of conceiving either is to be allowed. The only inference it seems reasonable to draw is that long familiarity has enabled Mr. Bradley really to enjoy what to a bystander appears a most distressful situation.

But it still remains a problem to account for the way he got into it, and to explain its discrepancy with the doctrine of the prior article.

This explanation is not difficult, if we observe (1) that the identity of method in the two articles was merely *verbal*, and (2) that the doctrine of No. 71 was not quite completely stated by us. Both articles, it is true, were concerned with the conceptions of coherence and comprehensiveness; but their use of them was very different. In the first article they were used in their concrete application to real problems of knowing, and consequently worked excellently; in the second they were taken in abstraction from any actual application, and consequently became ambiguous verbal phrases. And unfortunately this transition was mediated by the end of No. 71 (pp. 341-342), where Mr. Bradley's grasp of the principles he had used seems to relax and he allows himself to slip out of logic and to do homage to an alleged "demand for absolute reality," which, being unsupported by experience, was bound to hatch sceptical fogs out of metaphysical mares' nests.

In No. 72 Prof. Stout's concrete use of the 'ideas' of coherence and comprehensiveness is completely forgotten; they have become quite abstract and merely verbal. And this is to say that they are really unmeaning, and that the difficulties they seem to produce are really senseless. But it is possible to show this only to those who are willing to study the psychological facts of their use and to consider the meaning of terms in their concrete application.

Now in its concrete use the 'coherence' of two ideas is always psychological, whether or not it be of logical value as well. It means that they are judged to be *relevant* to each other.

Similarly the 'comprehensiveness' of an idea means its capacity to include all that is *needed* for the due treatment of a psychic problem. Here also the notion of relevance enters in and sets limits to the comprehensiveness. And the two qualities are kept perfectly compatible by this higher and controlling influence.

But if these notions are taken abstractly the situation is changed. The 'coherent' terms can no longer be held together by the purposive unity of the mind's activity, and 'comprehensiveness' becomes an absolute postulate. Consequently 'coherence' becomes an occult quality of viscosity whereby ideas inherently stick together, in what is at bottom a thoroughly irrational and inexplicable way, while 'comprehensiveness' becomes the expression of an inherently impossible demand that each fragment of reality shall 'somehow' expand into the universe. *Hinc illae lacrimae.*

Furthermore, when taken thus abstractly, the demands for coherence and comprehension become incompatible. 'Coherence' can never quite shake off its relation to *relevance*. For it can never be conceived that *all* things cohere with all, but only that those relevant cohere with each other. 'Comprehensiveness,' on the other hand, develops into a complete negation of relevance. If you are bound to include everything you must *add* to that which coheres relevantly that also which is irrelevant, and you cannot possibly confine yourself to the relevant. The result is "an unending incompleteness and an endless effort at inclusion" (p. 494)—and chaotic incoherence. Literally everything must go into your ragbag of a universe, and must cohere with everything else in a continuous chaos. It is clear that this 'ideal of knowledge' is really the negation of knowledge.

III. And the reason of this fiasco? A sheer misconception of the essential function of cognition. A failure to perceive that it is not our business in thinking to dissipate ourselves in the vain attempt to embrace everything at once, but that we should aim rather at concentrating ourselves upon the relevant and at abstracting from whatever can distract us from our immediate purpose. In a word, the essential selectiveness of thought is overlooked. The simple truth is that the ideal of knowledge as all-inclusiveness is a *false* one and we should resolutely turn our backs upon it.

IV. A student of concrete thinking would never be tempted to deny that thought is invariably selective. Indeed Mr. Bradley's own doctrine that thought is mutilation of reality is a sort of recognition of this. How then shall we explain the error, and the adoption of the opposite conception of the nature of thought?

I believe that the answer ultimately lies in the fact that so many philosophers have not yet emancipated themselves from a false psychology, which systematically inverts the true

order of cognitive procedure and engenders a false conception of its ideal.

This doctrine conceives the objects of knowledge, as originally given, to be distinct and separate, and *not* continuous and confused. Consequently the business of thought is essentially to bring together, and not to distinguish, to include in a whole, and not to articulate it. The classical and boldest expression of this psychology is found in the works of Hume. Unfortunately Kant never carried his polemic against Hume's theory of knowledge to the pitch of doubting its real foundations in his psychology, and all the schools of epistemology that revere Kant as their master (including the Hegelian) have tamely accepted it. Even in quarters where Hume is anathema and all knowledge of psychology is piously abhorred, it is tacitly assumed that the great problem of philosophic knowledge is how to 'transcend' the separateness of objects and to include them satisfactorily in a rational whole. One result is that the philosophic account of knowing is thrown into a grotesque antithesis to all the most obvious procedures of scientific and practical thinking.

In Mr. Bradley's case, however, this latent prepossession is not apparently a conscious one. But it finds unmistakable expression also in the article under discussion. For example, he plainly holds that the *existence* of "partial objects" is no problem and may be assumed by the logician, only urging that "with the object there is present something already beyond it, something that is capable both of demanding and of furnishing ideal suggestions, and of accepting or rejecting the suggestions made" (p. 494). "Feeling," therefore, not only presents immediate unity originally, but also distinct *unities*. These are sensible *facts*, and the doctrine of the priority to discriminated fact of a 'big buzzing confusion,' which modern psychology owes to James (and Aristotle!), if not unknown to Mr. Bradley, is at any rate *one* Jacobin doctrine of the American Revolution which he cannot claim to have anticipated or assimilated.<sup>1</sup>

Hence a modern psychologist will naturally think that the logician's 'analysis' of knowledge does not go very far, and goes by no means deep enough to solve his problem. He will say: 'Stop, my friend, you are going much too fast and skimming over the surface like an aeroplane trying to rise. Kindly explain, before you get quite up into the air, *how you*

<sup>1</sup> One is sorely tempted to assent to Mr. Bertrand Russell's doubts whether any philosopher ever understands another, when one finds Mr. Bradley professing his inability to discover wherein his view of free will differs from James's (pp. 505-506, note).



*managed to arrive at your notion of separate objects?* For if that is a delusion (or a convenient figment), your whole problem is illusory, and your final failure is merely the proof thereof.

Now Mr. Bradley himself is willing to admit that *prima facie* a theory of judgment which implies an ideal of a whole to be compounded by a process seen to be impossible, may cause misgivings. However unworthy of 'Philosophy,' he confesses that it is humanly "natural to seek for another view as to judgment and truth". But he is confident (without giving a reason for his faith) that "that effort has resulted, and will result, in failure" (p. 498).

And yet the alternative doctrine has been taught in biology and psychology for years and found to be successfully applicable to every scientific procedure! Science and life everywhere progress by making distinctions or differentiations within a given whole. Objects of thought are constituted by selective abstraction and purposive concentration within a presented continuum. The unity of the universe (of *diction* merely, of course, if we eschew the confusion of logic with metaphysics)<sup>1</sup> is always found, and has never to be made. What has to be made is the distinctness of the objects which we single out and make centres of attention. It follows that their distinctness continues only so long as some one has an interest in distinguishing them, and that when this lapses, they pass back into the whole, which is the background, datum and subject-matter of the cognitive operations which incessantly transform it. Of course this view makes all distinctions relative and has no room for anything absolute. But seeing that the notion of anything absolute in *actual* human knowledge is now admitted by its own champions to be unworkable, this disclaimer will perhaps be counted unto it for righteousness.

V. It is a curious fact that Mr. Bradley is nevertheless after a fashion aware of the humanist alternative. He discusses it, obscurely, under the guise of "the claim of designation to offer logical truth" on pages 500-501. Designation is defined as "the essential qualification of our meaning by pointing, or by the equivalent use of such terms as 'this,' 'here,' or 'my'". He admits it as obvious that meaning is in fact actually conveyed by such means, nay that "we are forced to use designation and cannot in life possibly get on without it".<sup>2</sup>

<sup>1</sup> Contrast p. 497.

<sup>2</sup> Can Mr. Bradley's own theory of judgment do so? If so, what does its 'reference to reality' mean?

But he denies to this process ultimate logical value, for a reason curiously illustrative of the verbalism into which the abstraction from personal thought (intended to make the thought 'absolute') inevitably sinks.

If ever, we are told, "you set out to seek truth in ideas," you "not only endeavour to say what you mean, but you are once and for ever condemned to mean what you say. Your judgments as to reality are here no less or more than what you have<sup>1</sup> expressed in them, and no appeal to something else, which you fail to make explicit,<sup>1</sup> is allowed. When, for example, you say 'this,' the question is not as to what you are sure is your meaning, if only you could utter it.<sup>1</sup> The question is as to what you have got,<sup>1</sup> or can get, in an ideal form into your actual judgment. And when you revolt against the conclusion that 'this' appears to be a mere unspecified universal, when you insist that you know very well what 'this' meant—our answer is obvious. What are you doing, we ask, with us here on this road?" on which "what is sought is ideas and nothing else is current" (p. 500). So judgment means nothing but "what ideally it contains; and contrariwise what you have not explicitly expressed and included in it is not reckoned". Wherewith exit the appeal to designation!

Now what does this strange doctrine mean? Simply the substitution of a compulsory inconvertible paper currency for the gold of living truth in intellectual exchanges. Nay more; not only does it sanction the use of a paper coinage of words, it actually ordains it and forbids us to offer hard cash! It prohibits any appeal from the abstract 'meaning of the words' to the actual meaning of the man! Logic is to abstract from the actual use of ideas, and confined to a 'way of ideas' which are nobody's thought and are meant by no one. They consequently become mere words. It is literally '*condemned*' to "mean what it *says*"—in words. *I.e.* it is allowed to mean *no more*, and no subsequent agreement of human intelligences to understand an actual meaning avails to set aside the original verbal compact. It matters not either that Logic is thus eternally excluded from the plenitude of actual meaning and starved on the thinness of potential forms, or that human thought is left logic-less. Mr. Bradley is sure that this is "the way of philosophy," though "it is not the way of life or common knowledge" (p. 501); he omits only to state whether the logical meaning is to be derived from the verbal inspiration of Hegel's *Encyclopædia* or of Prof. Baldwin's *Dictionary*.

<sup>1</sup> Verbally.

But will not common sense and common honesty retort—Then so much the worse for 'philosophy'? For how unreal and psychologically impossible this whole doctrine is! How utterly it ignores the plain facts of knowing! It cannot deny that in every case what the maker of a judgment means is a question of psychic fact. Nor can it deny that this meaning may not only be *meant*, but also understood. Whatever the terms used, therefore, in such a case, thought seems to have attained its object of communicating itself and conveying truth. But no, this belief is technically inadmissible. All these facts are to go for nothing, in 'philosophic' logic. And why? Merely because the meaning has been conveyed by words which would mean something different—in *another context*! Their meaning of 'this' in the actual case is to be ignored, because, forsooth, the *word* may designate another object in another case! That no doubt is a psychic fact, and it is perhaps creditable to logic to have discovered it. But it is a fact only about the use and the meaning of the *word*. It is not necessarily a clue to its actual meaning in any case, and it is utterly irrelevant to the logical question whether logic is competent to take official cognisance of actual meaning. Any sane logic, one might think, that was not wholly absorbed in figments and still capable of studying actual thought, would at once perceive that the issue here was not one as to the verbal meaning of certain terms, but involved the whole crucial question, first raised by Mr. Alfred Sidgwick, of whether the *application* of an abstract distinction had any bearing on its value. In his negative answer to this question Mr. Bradley, unfortunately, does not stand alone. He is only refurbishing Hegel's grotesque proof that the (word) 'I' is universal; and the whole traditional Formal Logic dogmatically makes the same denial. But it is punished by falling into inextricable contradiction and confusion.

The essence of humanist logic, on the other hand, is to have recoiled from this brutality and to affirm that a principle is merely an empty form, if it is taken apart from its application and its use. And for it the case of 'this,' 'here' and 'now' is in no wise peculiar. *For in their actual use all terms alike are designations, i.e. devices to convey an actual meaning in a particular context.* In the abstract, all alike are 'universal,' *i.e. potential forms for conveying future meanings, within limits loosely indicated by their past use.* A humaner logic will not suppose, therefore, that it makes any logical difference whether I say 'Puss' or 'Tom,' 'the weather is fine,' or 'this is a fine day'. My meaning in either case is the

same and the forms are equally vehicles of it: it is in either case particular, and *intended* to be applied to an individual case. If logic cannot understand this and feels bound to hold that these judgments differ in more than their verbal form, the sooner it shuts up shop and declares itself and the universe unintelligible the better. But to some at least it will seem more reasonable that it should avoid such consequences by revising its beliefs as to its proper assumptions.<sup>1</sup>

VI. But after all verbalism is only the penultimate error of intellectualist logic. The ultimate error which brings to nought Mr. Bradley's theory of knowledge, as all existing varieties of Formal Logic, is that it has committed the lazy abstraction from the *personality* of the thinker and so has dehumanised thought.<sup>2</sup> That here is the *fons et origo malorum* comes out very clearly on page 507, where Mr. Bradley attempts to justify the logical abstraction from personality by a metaphysical faith in the unity of the Universe. Our judgment can only be true because we believe that in it the one Reality is asserting itself, "and our confidence rests on the hope and faith that, except as an expression, an actualisation of the one Real, *our personality has not counted*, has not gone here to *distort and vitiate* the conclusion".<sup>3</sup>

Now waiving a legitimate protest against the *μετάβασις εἰς ἄλλο γένος* involved in this attempt to save bad logic by dubious metaphysics, it is clear that this doctrine involves (1) an extraordinary lacuna, and (2) an extraordinary self-contradiction.

(1) It seems to me, I confess, explicable only as one of those curious lapses, with which the psychology of individuals teems, that any one should ever have hit upon the idea that the unity of the universe could be made to guarantee the *truth* of our judgments, without asking himself at the

<sup>1</sup> Capt. H. V. Knox has acutely pointed out to me that if Mr. Bradley's doctrine of judgment intends to refer to a *concrete* reality, it makes at least an attempt at 'designation' itself. It therefore contradicts his present view as to the 'true way of philosophy,' which abstracts from the meaning-in-use. It does indeed seem obvious that if designation is foreign to logical judgment as such, judgment as such cannot refer to a reality not contained in the act; but is it not injudicious in a theory of knowledge which arrives at *both* these assertions to lay such enormous stress on 'coherence' as a mark of truth?

<sup>2</sup> Cf. my *Studies in Humanism*, pp. 111-113, and Capt. H. V. Knox in the *Quarterly Review* for April, 1909, pp. 402-407.

<sup>3</sup> Italics mine. If the sort of verbal criticism absolutism loves were enough to dispose of a creed, it would be a sufficient reply to ask how the one Real can be in need of 'expression' and whether to speak of an 'actualisation' does not imply that it was only potentially real before.

same time—what then could explain their *falsity*? I am not aware however that any monistic thinker has ever explicitly tackled this problem; but it is generally implied in their accounts, as in Mr. Bradley's, that personality is cast for the rôle of the devil, and must be regarded as the principle which 'distorts and vitiates' our truth. Yet even on Mr. Bradley's showing it is not wholly evil, but capable of a "willingness to suppress irrelevancy and to subordinate self-will". In other words, it can suppress its own essential characteristics. A very convenient devil! But further elucidations seem urgently needed.

(2) But supposing even that we could accept the view that personality was the Serpent in the Paradise of Logic, and could cast it out, we should only in consequence find ourselves involved in an acute conflict with the principle of comprehensiveness. For that must, one would think, demand that personality, for all its oddities and vices, must be included somehow in the 'universe' of metaphysical logic. Yet if it is, we shall not only have admitted a disturber of its peace, who insists on recognising 'irrelevancy' and 'suppressing' it, in spite of the verbally obvious fact that to the Whole no part of it can be irrelevant and worthy of suppression, but shall at the same time have rendered nugatory our former attempt to shift the burden of the responsibility for error off the shoulders of the universe on to personality. If, on the other hand, we refuse to 'comprehend' personality, as Mr. Bradley's logic seems on the whole to prefer to do, we shall at once provoke unkind inquiries as to what right a comprehensiveness has to its name which excludes anything whatever, and as to how a theory of knowledge can lay claim to comprehensiveness if it begins by counting out the personality of the knower. After all personality either is comprehended in the universe or not. If it is, how can it be excluded from the logical context of the judgment, and that on merely technical grounds and without examination of its merits and defects? If it is not, how can a doctrine that fails to comprehend it, claim to be comprehensive of everything? Will it, desperately, be asserted that personality is unreal and negative and incapable of rational recognition, like evil, error, change and time? If so, is there any conceivable point at which inability to deal with the facts of experience begins to count *against* a rationalist philosophy?

I confess that I cannot imagine how the 'absolutist theory of knowledge' can possibly meet these difficulties (save by the struthious method), but I dare say it has by now grown so

accustomed to consort with impossibilities, that it no longer troubles to meet difficulties and that a few more will not matter. And I suspect that at bottom this is Mr. Bradley's opinion too, whenever the 'hardness' of his thinking has brought on one of his candid sceptical moods; though it is possible that regard for the feelings of the soft 'Idealists,' who are still anxious to believe (or make believe) that their theory tends to religious edification, may prevent him from ever making a full confession thereof. On the other hand, it no longer seems incredible that one of these days by a great resolve (or from sheer weariness) he will sacrifice all the contradictions and antinomies which have beset him all his life to his growing perception of the value of the Pragmatic Method, to which he has now definitely conceded science and every form of human activity except 'philosophy,' and of which he himself is glad to avail himself whenever, as in N.S., No. 71, he is really reasoning, and not merely 'contemplating' abstract 'ideals of thought'. His willingness to reconsider the problem of Error is certainly a good augury, and will probably yield further enlightenment.

### III.—ON EVOLUTIONARY EMPIRICISM.<sup>1</sup>

BY H. S. SHELTON.

#### I.

THE ancient controversy between intuitionism and the various forms of empiricism continually recurs in many departments of human thought. During the past few years the intuitionism of Kant has been subjected to a number of powerful attacks. Dr. Schiller,<sup>2</sup> for example, has called upon the followers of Kant to define their position more clearly in view of the rise of the various forms of metageometry, and in many other ways has subjected this form of intuitionism to very cogent criticism. At the present time the drift of a large number of thinkers appears to be in the direction of a form of empiricism, if not identical with that of Mill, at any rate not far removed from the opinions of that famous writer.

Another method of explaining on empirical lines the nature of necessary truths is the humanistic view, with which the name of Dr. Schiller<sup>3</sup> is specially associated. This view asserts that the so-called necessity of a truth is largely a question of the human will that it shall be universal,<sup>4</sup> a necessity which we may describe as primarily emotional and

<sup>1</sup> Some of the main ideas of the present essay originate from a study of the works of Herbert Spencer, a philosopher whose achievements are far too little recognised at the present time. While it is my desire in this manner to express indebtedness where it is due, this expression must not be understood to imply either that Spencer would have approved all the opinions expressed in the present essay or that I am in agreement with all the views expressed by Spencer relevant to this subject. These latter are scattered in various parts of his published work, and particularly in *General Analysis* and in the essay *Mill versus Hamilton*.

<sup>2</sup> *Humanism*, p. 84 seq.

<sup>3</sup> Dr. Schiller appears to think that his postulate theory is very different from that of Mill, whose empiricism he attacks. This, however, is only true of some of the doubtful applications. Mill himself anticipated the idea of postulation and included it as an integral part of his theory (*Logic*, vol. i., p. 286).

<sup>4</sup> *Axioms as Postulates*, paragraph 2.



only in a secondary sense intellectual. Thus a postulate, which may be to a large extent arbitrary, would attain to the rank of an axiom after prolonged proof of its practical success.

These ideas are, however, open to equally cogent objections. It is certainly not true that the axioms each of us assumes take their origin in our will that they shall be true, or that they are to us in the first place postulates. Nor is it always easy to point out that they serve any very pressing intellectual or practical necessity. It is very doubtful whether Euclid or any one else possessed a compelling desire that things which are equal to the same things should be equal to one another, moreover such an inquiry is totally irrelevant to the certainty of the axiom. Nor is it entirely correct to say that it is an axiom because it works. That an axiom ultimately works is a truism, but its axiomatic character is recognised before we have experience of its working; and its certainty, though subjective, is entirely independent of our volition. We do not postulate it and we may never formulate it, but we recognise it as a necessary truth immediately its meaning is clearly understood.

Several facts which, if properly understood, are fatal to the postulate theory, are admitted by Dr. Schiller. He asserts, for example, that logical and geometrical postulates were used long before they were reflected on scientifically and still longer before they were understood.<sup>1</sup> With a statement such as this, neither intuitionist nor evolutionary empiricist will be disposed to quarrel; but they will be inclined to object to the looseness of Dr. Schiller's terminology. A "postulate" which is never postulated, but which is continually used and so becomes self-evident immediately the mind is sufficiently developed to understand it, is so nearly allied to an *a priori* truth that the term postulate becomes inaccurate and misleading. Whatever cogency any such remarks may possess against "Absolute" apriorism, they have none against the individual apriorism but racial empiricism advocated in this essay; indeed I could readily utilise many of his arguments in further support of my own view.

Though the advocates of the various forms of empiricism can, on certain lines, put forward very powerful destructive arguments, their opponents, whether Neo-Kantians or others, have little difficulty in making an equally effective reply. The indubitable nature of certain truths cannot fully be explained by the assumption that we have postulated them, or that, with

<sup>1</sup> *Axioms as Postulates*, paragraph 48.

or without postulation, they have been found to have been invariably consistent with experience. To use a cogent illustration of Sigwart, it is not a sufficient explanation of our certainty of the proposition  $2+1=3$  to show that we have invariably discovered that any three pebbles arranged \* \* can also be arranged \* \*. Let us take the example of the carpenter and his foot-rule. He measures and cuts a yard of timber and treats a second yard in a similar manner. He has no shadow of a doubt that the two yards will be equal to one another. This he cannot verify by direct experience, because he will always find, if he measures carefully enough, some fractional difference between the two.<sup>1</sup> All that experience can possibly verify is that, as he eliminates errors of measurement and other sources of inaccuracy, the length of the two yards will more and more approximate to equality. The axiom never is and never can be completely verified by practical experience, and we invariably explain any apparent exception that may occur in some other way for the simple reason that an exception to such an axiom is to our minds meaningless. Also, as we have already noted, it is highly probable that the carpenter will never have formulated to himself the axiom of quantity, the practical certainty of which he so arbitrarily and unconsciously assumes.

Any one who has attempted the task of making the euclidean geometry clear to a class of beginners will be struck by the same difficulty. For the purpose of making the practical truths distinctly understood, this reduction of everything to first principles is a cumbrous piece of machinery and an unmitigated nuisance. To the average mind, the reasoning is so much clearer if the axioms are not explicitly stated but tacitly assumed. If, by any chance, an intelligent child actually understands the meaning of an axiom, great is his wonder that all his life he has used and assumed it without knowing that so obvious a truth was capable of expression in such cumbrous and pedantic language. On matters of this kind, there is little doubt that, up to a certain point, the intuitionist can put together an unanswerable case. We need not think of such subjects as absolute space and time, but, if we do so, we are bound to think under certain forms and in a certain manner. The necessary truths are not the product of individual experience, but are self-evident to all as soon as their meaning is clearly grasped.

<sup>1</sup> Mill makes a reply to this objection and points out the logical value of proof by approximation (*Logic*, i., 268 footnote), but this begs the question. He does not deal with the point that apparent exceptions are invariably explained in an alternative manner.

We can thus readily see that all these current theories are open to very serious objections. It will therefore serve a useful purpose to remind the present generation of philosophers that neither the apriorism of Kant, the empiricism of Mill, nor the postulate theory of Schiller exhaust the possible alternatives. Owing to the application of the idea of evolution to the problems of the human mind, there is another theory which admits the *a priori* in the individual and yet ultimately explains all knowledge in terms of experience.

The first step in the elucidation of this theory must be to note the distinction between the world of percept and that of concept. The former is ultimate and primæval. In all probability since the first dawn of life, and possibly in inorganic matter itself, there is to be found some germ of sensation. In the widest sense of the word this is experience, and here there are no essential forms. For the flux of sensation and feeling there can be no *a priori*. This latter idea is only applicable in the world of concept. There are no necessary forms of sensation and of feeling though there may be necessary forms of intuition and of thought.

Without attempting to trace the order of mental evolution, we know that, in our own experience, it is only under abnormal conditions that we are ever directly conscious of the unordered flux of sensation. Unconsciously and subconsciously our sense impressions are arranged, analysed and tabulated under a multitude of concepts. We are not apparently conscious of patches of opacity and colour; all these are organised under definite forms, and the existences around us are apperceived as a multitude of concrete objects. So complete indeed is this organisation, that any residual unorganised or unexplained sensation is to us an occasion of annoyance and alarm. An unexplained sound or an unrecognised moving object puts us quickly on our guard, nor is our alarm quieted till this either ceases or is rationally explained.

While the conceptual element is thus so prominent in all ordinary recognition, so much so that only by psychological analysis can it be disentangled from directly presented sensation, in conscious memory and thought the conceptual element is still more prominent. As Spencer<sup>1</sup> so clearly pointed out, relations are much more readily remembered than particular sensations. We remember the relative position of the objects in a room more readily than the size or colour of any one of them, a melody more readily than the

<sup>1</sup> *Principles of Psychology*, i., 243.

pitch of any particular note. Memory is more retentive of the conceptualised abstractions than of the more concrete and simpler sensations. As thought becomes more developed, these concepts become more and more abstract, further and further removed from the primary sensations of which they are ultimately composed.<sup>1</sup> Here is the ground of the *a priori*. It is only in the world of the most abstract concept, in the sphere farthest removed, not only from primary sensations and feelings, but from those conceptual forms under which we naturally and inevitably apperceive all that we see, feel or hear, that any form of apriorism is possible. Thus we can conceive a limit to the world in which we live, to the numbers of the stars, to the ether which transmits their light, but none to space, an abstraction which we have never seen nor known. We can conceive, indeed we inevitably look for, a beginning and an end to all temporal existence, to all the forms and things we see around us, but, as we strip from all existence that which makes it intelligible or recognisable, in the sphere of the ultimate and shadowy abstractions of absolute time (and possibly of energy and inertia), we can conceive no beginning and no end.

Of no material objects is it *a priori* impossible that they may differ in size or shape, yet, in the world of concept, when we have asserted that two objects are severally equal to a third, we are unable to conceive their differing from one another. Thus it appears that, if we think at all, we are of necessity bound to think under certain forms. There is in the very structure of our thought something which compels us to organise our experience in a certain manner.

On the other hand, we must note the certain fact that all thinking beings do not reach the level of abstraction in which the *a priori* is to be found, that millions never know and possibly are incapable of appreciating the axiom of quantity or the ideas of absolute space or time. Thus we obtain the paradox that the *a priori* is inevitable and universal, yet understood by few, a necessary form of thought, yet difficult to disentangle. We are absolutely certain that certain truths are necessary and that certain forms of thought are *a priori*, yet generations of philosophers may wage interminable arguments as to exactly what they are.

<sup>1</sup> Let me guard myself here against any critic who may wish to raise a side-issue at this point and to accuse me of epistemological "atomism". Any atomism which is here asserted is a matter of fact pure and simple. As the experimental psychologists have proved, all human experience is in some way made up of feeling and sensation, how and why I do not attempt to explain.

This difficulty in the problem of the *a priori* must be clearly and definitely faced. It is not a solution to say, with certain followers of Kant, that the apriority of any given truth or axiom is not a question of apodeictic certainty, but can only be proved by observing the consequences of denying the axiom. This procedure is an excellent method of discovering what concepts are truly *a priori*; but it should be noted that this is merely appealing from one form of apodeictic certainty to another. Each step in the reasoning can only be accepted in so far as we are certain that each successive proposition follows from its premises. Ultimately, in some form or other, the *a priori* is a question of apodeictic certainty, and from this criterion there is no appeal.

This problem of *a priori* certainty is specially noteworthy in view of the fact that the special characteristic of our reasoning power is its great mobility. Unlike primitive instinct, which only reacts in harmony with a specialised environment, our system of concepts is so mobile that, as we have already seen, it is impossible to mention any concrete happening in the material world that is to us *a priori* impossible. That our country may be suddenly engulfed by the devouring sea, that the Sun may cease to give out light and heat, that our friend whom we buried years ago may return to us in the flesh, that a human shadow may attain independence and may develop into a man, are events so far removed from the common order of nature, that we may surely say no generation of mankind has ever witnessed them; yet, so far are these from being *a priori* impossible, that accounts of such happenings are continually found in myths and fairy tales. So fluid are our concepts that, impossible as we should practically term them all, some way might be found of admitting them as theoretically possible without doing violence to the laws of thought.

This characteristic of human thought, the combination of practical mobility with the iron rigidity of logical necessity, is not to be explained by denying to our system of concepts the quality of objectivity and the placing them in the category of conventions and practical expedients. Conceptual and perceptual elements are inextricably intermingled in all the affairs of everyday life and in all the investigations of physical science. To deny the objectivity of our concepts, their correspondence to external reality, is to reduce not only philosophy, but science and common sense, to confusion, and to undo all that has been accomplished in the evolution of the race. We must therefore put on one side the "conceptual shorthand" view of theoretic truth. It is a very easy and

a very plausible suggestion to say with some logicians<sup>1</sup> that scientific generalisations (and *a fortiori* physical and geometrical axioms) are merely the conceptual shorthand apparatus by which we can summarise the happenings in the world around us. According to this view, the law of gravitation is not a statement of the truth that one particle of matter attracts another particle of matter in a certain manner, but merely a piece of conceptual apparatus enabling us to predict the motion of the Sun and of the planets. This is particularly plausible because it is a patent fact that the law of gravitation does accomplish this purpose and also because, in science, we continually use working hypotheses which can correctly be described in this manner. These latter we can rationally explain by saying that they contain sufficient truth to make them workable, but sufficient error to make them untrue. The conceptual shorthand view of truth, if carried to its logical conclusion, implies that, not only the law of gravitation, but the statement that Jupiter is a planet revolving round the Sun or that a book has just fallen to the ground are merely conceptual shorthand explaining a certain presented series of sights, sounds and feelings. Such a view, if logically carried out, reduces all existence to the primitive flux.

It is not relevant to the scope of this essay to enter further into these epistemological controversies, but it is clear that, to obtain a firm starting-point for an investigation of the *a priori*, we must establish some kind of objectivity corresponding to our system of concepts. Unless we proceed on the assumption that, by means of our conceptual apparatus, we obtain an objective truth which is independent of our own personal idiosyncrasies and psychological peculiarities and that, so far as we succeed in eliminating error, this truth is independent of our own will and emotions, the problem of the *a priori* is scarcely worth discussing. Though practical needs and human will and interests may thus determine which truths we discover and which we ignore, we are inevitably bound to assume that these are in some way existent prior to our discovery.

Leaving therefore on one side these metaphysical discussions, we can sum up our starting-point in the following three brief propositions:—

(1) That in all our knowledge the perceptual and the conceptual elements are inextricably entangled.

(2) That, so far as we succeed in eliminating error, the

<sup>1</sup> The originator of this particular view is, I believe, Prof. Karl Pearson see *Grammar of Science*, 2nd edition, pp. 85-87).

conceptual abstractions correspond to definite concrete reality and that this correspondence does not necessarily decrease with the degree of the abstraction.

(3) That some of these concepts are *a priori* to the experience of the individual.

The antinomies and paradoxes apparently involved in these statements can be clearly explained immediately we regard the faculties of life and mind from the standpoint of evolution. Whatever may be the ultimate purpose of the human intellect, there can be no doubt of its evolutionary meaning. Regarded in this light, human thought and reason becomes a specialised method of the animal man in adapting himself to his environment. This power of reason, of perceiving and forecasting the character of his surroundings by means of concepts, gives him an incalculable advantage over his competitors in the struggle for existence. According to this evolutionary view, our minds, like our bodies, have been evolved by the continual contact of innumerable ancestral forms with the world in which we live. Owing to this process of mental evolution, man, from his earliest childhood, is not conscious of the unordered flux of sensation. Indeed, none but philosophers are aware that such a thing exists. So soon as external existence begins to make any sensible impression on the mind of a child, so soon that is as it begins to "take notice," these are integrated and organised as objects which require further investigation. We bring with us, as a product of our inheritance, an irresistible tendency to organise our experience in a certain way. The same is true of other forms of our concepts, and, according to the view expressed by this essay, is true also of those axioms which are termed by the older philosophers *a priori*.

We thus conceive space and time in a certain manner, we know that things equal to the same thing are themselves equal, that  $2+2=4$ , not merely because we have found them to be invariably consistent with our experience, not merely because our reason assures us that our experience of extended being can only be co-ordinated as existing in an infinite entity which we call space or that our experience of succession is to us only explicable as a part of an everlasting entity we call time, not because we have postulated these and found them to work, but because objective reality corresponding to these concepts has reacted on the innumerable series of ancestral forms dating back possibly to the earliest forms of life. These truths are *a priori* and inherited in the individual, but are the product of the experience of the race.



Such is the broad outline of the theory of evolutionary empiricism. It is one which, if properly understood, is open to none of the objections which can so readily be urged against its rivals. At first sight, however, it might appear that it is involved in certain special difficulties of its own, which, before we go further, it will be convenient to notice and remove.

The first is an outcome of modern ideas of heredity. As our present theory regards human faculties from a biological standpoint, we are bound to consider it in relation to modern biology. The tendency of present-day biological theory appears to lie in the direction of explaining all human faculties and characteristics by the aid of natural selection. Owing to the widespread acceptance of Weismannism in the biological world, many authorities are disposed to refuse to credit any theory which implies the assumption of any form of use-inheritance. If, then, we accept natural selection as the all-sufficient cause of human faculties and of human societies, we can readily understand that this would account for a general increase in mental power, but it is more difficult to picture to ourselves how particular forms of intuition can become inheritable in the race. Fortunately here we are enabled to dispense with theory when we remember that our earliest tendencies to classify the product of our sensations as objects and things are certainly inherited, as is also the general order of the development of our mental powers. Nevertheless, this particular problem of heredity will obtrude itself.

In reply to this difficulty, if there were no other solution, I, personally, should immediately cut the knot by asserting that these results are not purely the product of natural selection. Though it is an obvious fact of experience that specific acquired qualities, whether physical or mental, are not inherited in the offspring to any considerable extent, I am of opinion that this non-inheritance is not absolute. If this be so, the course of evolution is clear. Ideas which, in the continual succession of organic forms, are invariably consistent with the experience of external nature, would thus produce a corresponding change in brain structure and, through this change, when in course of time the continual succession of faint inheritances adds up to an absolute change, would become a fixed possession of the species man. Natural selection appears to me to be necessary, not to account for the inheritance of brain structure rendering certain ideas *a priori*, but for the fact that this apriority is so small in amount. Whether this be so or not, it would be superfluous

to remind philosophical readers how necessary it is, in investigating its bearing on psychology and philosophy, to preserve an open mind on this matter, which is now in danger of becoming a biological dogma.

It should, however, be clearly noted that the theory of evolutionary empiricism is not bound up with any particular theory of evolution. If, as a section of biologists appear to think, all human characteristics and progress are to be accounted for in terms of some form of Natural Selection, it is easy to point out that the difficulties here are not greater than elsewhere. If natural selection will account for the majority of vertebrates possessing five digits on each limb, instead of four or six, for the variations in the sensitiveness of the human skin, for the production of lank hair in the Mongol and of woolly hair in the negro, it would surely account for a congenital change in brain structure, which would make certain ideas, invariably consistent with experience, organic in the race.

Another objection of a more metaphysical character is somewhat more difficult to surmount. The conception of the apriority of ideas in the individual due to the action of evolutionary forces does not at first sight appear to imply that this apriority is any guarantee of what we may term absolute truth. We can imagine, for example, that it might be subjectively inconceivable that things equal to the same things should be unequal and yet that this subjective impossibility might actually be a property of objective reality. Playfair's axiom might then be *a priori* and yet space non-euclidean. A metaphysical problem of this kind can never be completely solved, it is only possible to show that this particular example of speculative scepticism can be shown to be less valid against evolutionary empiricism than against any other explanation of necessary truths.

In the first place, we must note that these *a priori* forms of thought and necessary truths are very few, and that empirical continuity through the course of many generations is insufficient to form apriority in the human mind. Generations of men have pointed their course through the desert by the light of the polar star, the Sun and the Moon have given their light to the world since the dawn of earthly time; yet, in our minds, we have no *a priori* certainty that the future will disclose to the eyes of the watcher Sun, Moon, or stars. The truths which are *a priori* must correspond to happenings in the Universe more constant, more invariable, more certain, truer than any empirical truth based on the conscious obser-

vations of mankind. That any idea should become *a priori* that did not invariably work in practice would be fatal to the survival of the individual and the race. That the essential nature of intellect is its mobility, its adaptability to meet all conditions, makes it all the more striking when we find our minds are so constituted that we are unable to conceive certain forms of existence in any other than a certain definite mode.

Though the metaphysical difficulty cannot be surmounted entirely, it is to a large extent dispelled by our comprehension of evolution. While the hypothesis of pure empiricism gives us no guarantee of the truth of our fundamental conceptions, while, according to the humanistic view, they are purely postulates (very possibly false) on which we proceed till we find empirical proof of their practical working, while the Kantian view asserts their quality as a property of the mind and gives no further explanation, the conception of evolutionary empiricism, though it gives no guarantee of absolute truth, confirms our intuitive certainty that they at least are bed rock, more certain and more fundamental than any other portion of our human knowledge. It should also be noted that the acceptance of the idea of evolutionary empiricism in no way robs the metaphysician of any weapon he is accustomed to use against the philosophic sceptic. If he is accustomed to say that the query regarding absolute truth is meaningless and that the terms truth and reality have no meaning apart from human experience, he is still entitled to use the same argument. His argument is as valid or as invalid as if he proceeded from some rival epistemological theory. Evolutionary empiricism extends the meaning of the term Experience but affects the metaphysical problem in no other way.

So far we have regarded apriority statically and, to avoid unnecessary controversy, have confined our examples to the fundamental concepts of space and time and to the axiom of quantity. It is, however, an admitted fact that the truths which are recognised as necessary will vary with the time, place and conditions of knowledge. New *a priori* truths are continually being recognised. It may occasionally happen that some ideas, mistaken for *a priori* truths, may ultimately be abandoned as false. We must now examine this dynamic aspect and see in what way this progressive character can be accounted for by the explanation of evolutionary empiricism.

## II.

To accomplish this we must consider our topic subjectively. Though we have emphasised that innate *a priori* ideas can only be so because they correspond to some objective reality, we must not lose sight of the fact that there are no ideas and consequently no *a priori* independent of the recipient mind. This human mind is itself a product of evolution. Both in the history of the race and in the development of the individual it has passed through certain stages and it is only by an examination of these stages that we can understand the process by which these truths become recognised.

This process itself has two sides. That our ideas are in some way a complex of our sensations and our feelings is a commonplace of modern experimental psychology. Therefore, to investigate the origin of any particular succession of ideas, we have in theory two processes which are themselves subject to change: the receipt of sense impressions by perception and the classification of ideas by reflection. Every individual and every generation is continually receiving new sense impressions and thus forming new groundwork for the raw material of thought, and every individual is, to a greater or less extent, classifying his thoughts and discovering and testing truth by the process of reflection.

For the purposes of this discussion the latter only is immediately practical. Though, by the researches of modern science and in other ways, we are continually being brought into contact with fresh material fact and, by this extension of the object of sensation, it is theoretically possible that other truths may ultimately become *a priori*, we must recognise that this is only a remote possibility bearing on the far distant future. In no ordinary finite time is it likely that the product of such will become organic in the race. We must therefore take these sense-impressions as approximately a fixed quantity and confine our attention to the development of the process of conscious reflection.

We have already recognised the fact that axioms are practically used before they are theoretically recognised. Long before any philosopher formulated the fundamental axiom of quantity, carpenters used the rule and merchants used the balance. The *a priori* truths which the philosopher consciously formulates are used instinctively by the common man. They are inherent in the experience of the race as expressed by action. The process of conscious philosophic thought is thus the abstraction from the content of our ex-

perience of those fundamental truths of which instinctively all are dimly conscious.

An example of a truth now universally recognised, which, I maintain, is *a priori* to our individual experience, and yet the recognition of which is an event of recent history, will be found in the Law of Inertia. As Prof. Poincaré so clearly points out, so far from this having been universally recognised as true during the course of human thought, it was categorically denied by the Greeks<sup>1</sup> who believed that motion ceased with the cause of motion or that bodies, when left to themselves, would move in a circle, the most perfect of all forms of motion. For this and for a number of other reasons he argues that the principle cannot be *a priori*.

It is perfectly clear that such an objection, if valid, is fatal to all forms of apriorism. If it were essential that, in the conscious formulation of a truth, there should be no possibility of human error, no principle could be *a priori*. No doubt many an unhappy schoolboy has said and written in all good faith that things which are equal to the same things are unequal to one another. At the same time Prof. Poincaré is the first to state clearly and explicitly that the principle will never be abandoned or amended by subsequent experiment.<sup>2</sup> Now this, it appears to me, is equivalent to saying that it is *a priori*. If a principle is not subject to amendment or correction by subsequent experiment, this is equivalent to saying that we necessarily assume it in the explanation of any known phenomenon and this is (in the sense used in the present essay) the same as asserting that it is *a priori*.

If we discovered the motion of any body ceasing without apparent cause, we should thereupon search for the retarding agency. If, for example, the velocity of the planet Neptune gradually decreased, we should thereupon postulate a resisting medium, or another attracting agency, or some force acting upon it of which we were not aware. We could not do otherwise. If generations of scientists failed to discover the cause of this strange phenomenon and if such occurrences were continually repeated, we should not deny the law of inertia, we should be bound to say that the solar system contained forces of which we were unaware.

In this particular case, it is not difficult for us to understand in what manner this principle can become inherent in the experience of the race. No doubt Greek philosophers did put together a meaningless form of words and say that

<sup>1</sup> *Science and Hypothesis*, p. 91.

<sup>2</sup> *Ibid.*, p. 95.

motion ceased with the cause of motion. It is possible to put together words and sentences and to become convinced that these convey an intelligible meaning. In this case it is perfectly clear that the philosophers did not clearly represent to themselves the terms of the relation that they attempted to express.

Neither the Greeks nor any one else at any time, in any real sense of the word, believed that motion ceased with the cause of motion. A Greek who watched a boulder, which, after falling rapidly down a hillside, had just reached the level, would not act as if its motion would suddenly cease. He would not place his limbs in running in the new and eccentric attitude required by his peculiar philosophical theories, nor would he hold himself as a target for the arrows of his enemies or cease to draw a bow or throw a javelin. By countless actions such as these, the principle of inertia has become a part of the instinctive and subconscious experience of the race and this, *when it is correctly interpreted in terms of abstract thought*, gives us an *a priori* principle.

The conscious formation of these principles is an intellectual process. Here there is room for postulation. In all processes of human thought there are possibilities of human error. It is theoretically possible, though practically very improbable, that even now the principle of inertia may not be stated in words which will defy the criticism of the future. But the meaning is more fundamental than the verbal form, the thing is more essential than the name. Whatever may be the future discoveries of science, we can be quite sure that the principle of inertia, possibly not perfectly expressed or fully understood, *contains* an essential *a priori* truth.

A similar treatment is applicable to the axiom of parallels. On the nature of this axiom geometrical experts differ widely. Prof. Poincaré treats this in the same manner as he treats the law of inertia. He carefully explains that it is not based on experiment or observation. It is clearly not an empirical law.<sup>1</sup> He definitely asserts that the euclidean geometry has nothing to fear from fresh experiments. He comes to the conclusion that they are neither synthetic *a priori* intuitions nor experimental facts. They are conventions, definitions in disguise. "One geometry is not more true than another, it can only be more convenient."

<sup>1</sup> See *Science and Hypothesis*, pp. 73-75, particularly the following passage: "I challenge any one to give me a concrete experiment which can be interpreted in the euclidean system, and which cannot be interpreted in the system of Lobatchewsky".

On the other hand, Mr. Bertrand Russell, both in his earlier and in his later works, maintains that this axiom is purely empirical<sup>1</sup> and (as other systems of geometry give results not empirically distinguishable from those of Euclid) quite possibly false. It is only fair to say, however, that the positive work of this latter author is no way bound up with this particular opinion.<sup>2</sup>

It is of course a matter of common knowledge that geometries can be built up based on a denial of Playfair's axiom and that these systems are logically self-consistent. (How an individual who denies the existence of any form of apriorism can explain this logical certainty is not easy to understand.) Certain conclusions follow necessarily from certain premises. But this is not the point with which we are here concerned. The exact meaning and value of the non-euclidean geometries is not relevant to the present discussion. What we have to decide is whether our fundamental concepts of space are consistent with any other idea of parallels than the euclidean. If we can show that it is not we shall show that the axiom of parallels is *a priori*. Of this there can be little doubt. In spherical space a "straight" line returns on itself. But then the line is not straight. We are immediately impelled to ask what exists outside this enormous circle. The consciousness of this limit is inseparably bound up with the consciousness of a space outside the limit. The same is true of hyperbolic space. In this space "parallel" lines get further and further apart. But then they are not parallel. We are immediately impelled to ask why we cannot draw straight lines which continually maintain the same distance. We can readily picture to ourselves that any material line (such as the path of a ray of light) may bend in any conceivable manner. There may be in the ether of space some property which twists and bends any material line we can draw. But this is matter not space. And the ether of space might equally well be so constructed as to render invalid the axiom of free mobility and so invalidate the practical certainty of all forms of geometry whatsoever. Even then we should be compelled to believe that, when the material substance was removed, there would remain the space in which euclidean geometry would be true.

Here we have an answer to Prof. Poincaré. I would submit that, in such a case as the one here suggested, for the purposes of astronomy, euclidean geometry would probably not be the most convenient; but we could not extinguish

<sup>1</sup> *Principles of Mathematics*, p. 458.

<sup>2</sup> *Ibid.*, p. 373.



from our minds the consciousness that euclidean geometry was true.

The difficulty with regard to this particular axiom has always appeared to me to be one of statement rather than of substance. The complicated fifth postulate of Euclid is certainly not axiomatic. From this point of view, Playfair's axiom is a great improvement. The meaning is the same but the verbal form is greatly improved. This has been accepted as *a priori* by many eminent mathematicians including Cayley. That there still remains any possible doubt on this matter appears to me to be due to the fact that greater lucidity of statement is still to be achieved.

This is the function of reflective thought. Our fundamental ideas must be disentangled from all unessential ideas and the terms of the relation must be so stated that, when once their meaning is clearly grasped, no doubt is possible.

The preceding exposition will show the advantage of this theory over rival explanations. With the Kantians it admits the apriority of certain ideas to the experience of the individual. With the empiricists it ultimately explains all knowledge in terms of experience. With the humanist, it admits the importance of postulation and the progressive character of axioms and necessary truths. It differs, however, from these latter in that it refers this mental process to the subjective side of being and in that it gives a truer account of the process by which necessary truths become recognised. According to this view, no amount of individual and empirical experience of its working qualities can raise a postulate to the rank of an axiom. The truth must be stated in such a manner that, to those who have clearly grasped its meaning, the contradictory is unthinkable.

A cogent example of this difference is found in the treatment of ethical and religious postulates. Dr. Schiller attempts to show that these are axioms which have not yet received canonisation. According to the view of evolutionary empiricism, there is no reason to assert that ethical and religious axioms may not yet be disentangled from the multitudinous confusion of human thought. But the future ethical Newton must so state his axiom as to show that its acceptance is organic in the very nature of human thought. If he can do that, we shall be able once more to enlarge our conception of individual *a priori* truths.

Against the view expressed in these pages it may be urged that epistemological and metaphysical problems are yet unsolved. They are. No attempt is made to solve them.

No such attempt would be relevant. How and why the mind can abstract concepts which correspond with concrete reality is a fascinating problem, but, for the purposes of the present essay, it is sufficient to assert that we know it does. To describe this process in detail would require a new critique of human reason.

As we have already seen, the problem as to whether our *a priori* ideas are in an absolute sense true is also unsolved. All that evolutionary empiricism can assert is that they are of necessity truer than any other. Their making requires the whole faculties of man and the inherited experience of the race, not merely the intellectual powers of any set of individuals. Metaphysical problems are unsolved, they are merely removed one stage further back.

The object of the present essay will be achieved if it succeeds in enlarging the conception of human experience and in bringing before the philosophic world a valuable idea which the present generation appears to have forgotten.

#### IV.—ASSOCIATION AND ÆSTHETIC PERCEPTION.

BY J. SHAWCROSS.

My aim in the following pages is to show in what manner, if in any, the mental processes comprised under the term association are active in the perception of what is beautiful, and how far the knowledge of these processes can help us to an understanding of beauty in nature and in art. By an understanding I mean, not the capacity for enjoying beauty, but that insight into its nature which comes from reflexion and analysis.

##### I. CERTAIN FEATURES OF ASSOCIATION.

In this section I wish briefly to draw attention to certain features of the phenomena of association which, though not all of equal importance for the psychologist, are pertinent to the present discussion. Psychology has shown that the apparent variety of modes under which the principle of association operates can be reduced to the single mode of contiguity, or continuity of interest. But a distinction still remains in respect of the extent, and again of its intensity, of its operation. It is evident that whereas some associations are, so to speak, the common possession of the whole human race, or of large groups of it, others are confined to the experience of a single individual, and that between these extremes an infinite gradation is possible. In respect, again, of their intensity, or let us rather say of their permanence, associations differ widely. In some cases, the power of self-reproduction soon fails; in others, it persists through a lifetime.

To this distinction in respect of universality and permanence between different associations corresponds a distinction in the nature of their causes. Every ideal reproduction is founded, as we know, on some real or external connexion of circumstances. This external connexion may be part of the natural order of things (as in the case of smoke and fire), or it may be arti-

ficial, an invention of the human mind (as in the connexion of words and other symbols with that for which they stand). Now it is evident that that characteristic of universality, of which we have just spoken, can only attach to associations which are founded on universal experiences; on experiences, that is, which inevitably befall the individual as a member of the human race or of a definite section of it. As to the other characteristic, that of permanence, this evidently depends upon two conditions in the original experience—its strength, and its frequency. A single experience, if it has been singularly strong and vivid, may be the basis of a permanent association. If, on the other hand, the original experience has been transient or insignificant, it must be repeated with considerable frequency before it can give rise to a firmly established association. Now these conditions of vividness and frequency are both of them more likely to be fulfilled by experiences which are universal (in the sense indicated above) than by such as are contingent and individual. Frequency and regularity of occurrence can only be guaranteed in experiences whose root is in the natural order of things, such as our experience of the sequence of night upon day. Vividness, again, and impressiveness are especially characteristic of our fundamental experiences as human beings. It appears, therefore, upon the whole, that the more universal and permanent a mental association is, the greater the probability that it rests upon a general and deeply significant human experience.

My purpose in thus insisting upon what may seem a self-evident truth will, I hope, appear later. At present I would remind the reader that my chief aim, in examining the phenomena of association, is to discover its function in that particular species of human intercommunication which we term art. Now it is evident that all communication, in the child as in the adult, in the savage as in the civilised man, depends upon and presupposes the existence, in the minds of those communicating, of a like experience, and, on the whole, of a like sequence and connexion of images and impressions. It presupposes further, that the medium of communication will possess a like significance for both in relation to that experience. In the earliest stages of human society, before the invention of the written or spoken word, man was confined to an actual imitation of the specific experience which he wished to communicate. Instead of words, pictures of the object, for which, later, words came to stand, were employed; instead of speech, the actual sounds which were connected by a natural relation with the emotions to be expressed.

This mode of communication, it may be remarked, is still to be seen in the animal world; the sounds, which danger would spontaneously force them to express, animals use deliberately to communicate to their fellows the presence of danger. But man by a natural instinct soon replaced this clumsy and laborious method of communication by one more simple and more economical. For the purpose of the speaker in the vast majority of cases being, as thought progressed, not to call up a distinct image of particular objects or definite sense-impressions, but rather of the general qualities and relations of objects, or of a certain aspect of particular objects, it is obviously a superfluous, if not an inadequate proceeding, to call up distinct and complete images before the mind. Hence names were invented which suggested just so much or so little of the thing they stood for as it was the purpose of the narrator to suggest. The next step was a further advance in abstraction, when thought became fitted to deal with general qualities and relations. Here the need of definite sensuous images was evidently less felt than ever. But as man's power of expression always lags behind the growth of the inner life which demands its exercise, words, whose primary function was to express a concrete image, are pressed into the service of abstract thought. This is the concrete or poetic stage of speech, which leaves its marks upon a language long after it has passed away. Finally, as thought becomes more and more abstract in its processes, language becomes more abstract also, until the single words which convey a definite image dwindle to a small and insignificant class. Not that the words themselves actually change their forms to meet the new needs of expression; but these forms are invested with a new significance. Hence the highly civilised speaker or writer, who wishes to call up a distinct image in some degree approaching reality in its concrete details, is obliged to employ a large number of words, each expressing abstract qualities, and to depend upon his hearer's power of combining them in a single object. For the purposes of ordinary intercourse, however, this is rarely necessary. For in thinking and communicating our thoughts we are concerned either with particular aspects of objects or with that which is general and typical in them; in either case we idealise the object by abstraction, and it is unessential to our purpose to form in our own minds or in our hearer's a definite picture of individual things or experiences. One species of human intercourse, however, there is, the purposes of which cannot be adequately attained save through the medium of concrete and sensible impressions. I speak

of art and of artistic communication in the largest sense; these by their very character demand in less or greater fulness of detail, an ideal reproduction of the world of our experience. It is with regard to this specific form of communication that we have to consider how far, and in what manner, it is indebted to associative processes for the attainment of its ends.

## II. ARTISTIC EXPRESSION.

First, however, we are constrained to ask ourselves, what the ends in question may be. And the problem thus proposed necessarily brings us face to face with the larger problem of beauty, its nature and constitution. But to consider this problem, even in outline, would take us too far afield. I propose, therefore, to assume the correctness of the generally received definition of beauty, considered as a quality of the object—namely, that it is the sensuous or material expression of an immaterial content. This definition, though incomplete, is sufficient for my present object; nor will I attempt to determine it further, either in respect of the content (*e.g.*, by inquiring whether any or every content is susceptible of æsthetic presentation) or in respect of the form (*e.g.*, by considering under what limitations of form the sensuous presentation deserves the name of beautiful). The sole point which here concerns us is the nature of the relationship between form and content, the question, that is, of the means or manner of expression. Granted that the artist's object is to convey a particular modification of our inward life, is it indifferent what means he adopts to this end, so long as he succeeds in fulfilling it?

In such an activity as this, where no moral principle is directly involved, it seems evident that the means are justified by the end, and by that alone. But let us examine more closely the nature of the end. It is not enough to say that the artist wishes to convey to, or set before, those whom he addresses, certain spiritual experiences. His aim is above all things so to communicate those experiences that others shall be able to share, that is, to feel them and live in them. To this end they must do more than recognise the truth of these experiences, or reflect upon them as objects of knowledge: they must identify themselves with these objects, and know them by becoming them. But this is only possible through an unconscious and unreflective act, an act of imagination, enabling them to pass from the object to the life which it presents, or rather, in the contemplation of the ob-

ject, to become one with that life. The question therefore arises, whether all forms of sensuous presentation of an ideal content will fulfil these conditions, and so serve as the medium of genuine æsthetic enjoyment. But, it may be asked, fulfil them for *whom*? That which is art, and capable of affording artistic pleasure to one, is not, we know, art to another. This apparent difficulty need not concern us now. For although this pleasure may be excited in different persons by different objects and in different degrees by the same object, according to the degree of their natural sensibility and artistic training, the mode in which the process is affected is not subject to the same variation; it is identical for all. Our problem therefore is to examine the various modes in which an inward life is sensibly expressed, and decide how far each of them is capable of arousing true æsthetic pleasure; then further to consider, with regard to these genuine instances of such pleasure, how far their effect is due to processes of association.

A broad basis for our classification is suggested at the outset by the distinction of natural and artistic expression. By natural expression I do not here mean merely expression through natural forms (for this may be artistic); but the unconscious revelation of the inward life by gesture, motion, play of features. Can such expression, we may ask, ever deserve the epithet beautiful? Here we are reminded of our indispensable subjective test of beauty. Submitted to this test, the question becomes, "Can we derive a genuine æsthetic pleasure in contemplating the natural expression of life?" Such a question seems at first sight only to admit of one answer: we can, and, if we have a trained eye and vivid perception, we do constantly derive such pleasure from the thousand modes in which Nature is continually manifesting herself to our eyes. But is this pleasure only æsthetic? Is it identical in kind with the emotion which the same vital content, artistically represented in colour or marble, would excite? The answer is, that it may or may not be. We are capable of an ideal, æsthetic interest in the actual life around us, but only so far as by an effort of the imagination we abstract from its reality, and raise it to the plane of the ideal. This is easy where the life represented is itself pleasurable, but the expression of sorrow or pain, which in art is not only admissible but is often the source of the highest beauty, cannot please us in actual life without our doing violence to our own natures. Such an attitude, not only to particular experiences, but to life as a whole, is indeed possible, and most of us have seen examples of it in the range



of our own experiences; but it is essentially false, and points not only to callousness of heart, but to a narrowness of intellectual sympathy which confuses the real and the imaginative spheres of being. Under these limitations, however, natural expression may be and often is beautiful: indeed, we may go so far as to assert that all self-expression of a healthy, freely and normally developed life *must* be beautiful, and capable of arousing the feeling of beauty. Now it is evident that in all examples of this kind of beauty the relation between form and content is of the most direct and intimate nature possible; for the one is the inevitable effect of the other, and they are bound by the law of natural causation. In the same way and for the same reason, our recognition of this expression, our comprehension of its meaning, is peculiarly remarkable for its directness and universal spontaneity. For this is the language of universal Nature, and must needs be understood of all her children.

Hence it is that of all modes of expression, that which the artist most frequently adopts is founded upon this natural relation of spiritual or vital content and expressive form; more especially in the human face and frame. Here his aim is to outdo, as it were, the expressiveness of Nature, in his imitations of her, or rather to exhibit the expressive possibilities which lie in natural forms and motions. This end the artist achieves as much by the omission of what is irrelevant, as by the accentuation of what is essential. Hence the charm of his imitation lies in its entire adequacy, its ultra-significance. But there is another kind of imitation of these naturally expressive forms, in which imagination, perceptive now and not creative, allows herself a far wider scope and a remoter degree of likeness. I speak here of Nature's imitation of human life, through incidental resemblances of form, colour, or motion; an imitation upon which much, if not all, of our æsthetic pleasure in natural objects is founded. In virtue of these resemblances man is able to project his being into the objects of animate and even of inanimate nature, and live in imagination the life whose language seems written upon their external features. Nor is it necessary that the emotional life thus presented should be pleasurable. The sighing of the breeze of evening, the sullen roar of breakers on a wind-swept coast, a scarred and battered tree, may all be equally capable of affording genuine æsthetic pleasure, though the experiences which they suggest are such as in actual life we should instinctively fear and avoid. For what we seek in art is a presentation of life in all its aspects, its sorrow and tragedy as well as its joy and laughter; and the

truth of the line, "Our sweetest songs are those that tell of saddest thought," holds good for every sphere of imaginative experience. All we demand is that the particular presentation should be charged with a deep and universal significance, or at least should be capable of taking on that significance. This capability is insured, in the case of artistic creations, by the imitative skill of the artist; in natural forms it is insured by an incidental resemblance, aided by the idealising power of the imagination. But in both cases the relation of expressing form to content expressed is one and the same, it is the relationship of cause and effect, which exists, as we have seen, in all natural expression, and which is here the object of imitation.

Is there then, we may now inquire, any other relationship besides this of cause and effect, actual or imitated, which fulfils the conditions of artistic or imaginative expression? A further consideration of the beauty in natural objects may help us to an answer. For the most part, as we saw, this beauty resides in their power of imitating natural expression. But there are instances, I believe, where natural objects please us for what they express, and yet are not directly expressive in the sense we have hitherto considered. It may be, however, that the distinction is only apparent. What is it that delights us in the glassy calmness of a hill-bound lake, or in the bold upward thrust of a mountain peak? Such cases seem, in truth, to admit of a twofold interpretation. The observer transfers himself, in imagination, into the physical position of lake, or mountain, or attributes to them the power of consciousness, and thus enjoys the emotions attendant in the one case on perfect restfulness, in the other on strenuous aspiration. Or a more remote relationship, the subtle parallelism of physical and spiritual energies, is at the root of their expressiveness; the calm lake symbolises the calm of the spirit, as the ascending mountain symbolises its aspirations; and this by virtue of that mysterious analogy of the material and immaterial, our consciousness of which not only evinces itself in the daily use of figure and metaphor, but pervades all allegory and symbolism, and underlies every effort to make real and intelligible to ourselves the facts of our immaterial life.

In neither of these interpretations does the principle of what we have called natural expression enter directly. The first of them, indeed, seems founded on a reversal of that relationship. In the case of natural expression the emotional state or activity precedes, as we saw, and determines the outward state. Joy, anger, elation, depression, youth and age, strength

and weakness all bring with them their corresponding outward or physical modifications. But it is evident that a physical state or modification whose cause lies, perhaps, outside the individual experiencing it, will, in its turn, give rise inevitably to a corresponding inward change. The various mental states connected with the various physical movements, or again with entire absence of movement, furnish the illustration most apt for our purpose. For to take the two instances of natural beauty last discussed, the sleeping pool and soaring mountain are beautiful, not because they directly express a mental state, but by their suggestion of certain physical conditions, in the one case of rest, in the other of upward motion, and the pleasurable psychical state which is inseparably bound up with either of these, and which may be purely sensuous, or of a higher nature<sup>1</sup> (*e.g.* the sense of freedom attending uninterrupted progress).

We have thus discovered at least two varieties in the relation of form to content, and both within the sphere of strict natural beauty. Both of these fulfil the subjective conditions of æsthetic enjoyment; they admit, nay, invite and compel the observer to a self-identification with the life expressed, apart from any conscious effort of reflexion and comparison. Yet it is evident that the mental processes involved are not the same in either case. A consideration of their discrepancies may lead us to the question originally proposed, by showing to what extent the principle of association is present in either case.

### III. THE FUNCTION OF ASSOCIATION.

Our power of interpreting facial and bodily expression is evidently not instinctive in us, but is the cumulative result of long processes, founded to a large degree on more or less frequent acts of observation and experience. It is in fact only a special case of memory, and like all memory, it rests upon the principle of association. But in the æsthetic interpretation of imitative forms, association is doubly active; first in recalling the human form which is imitated, secondly in attaching to that form the mental content which is by nature allied to it. Both acts are, or should be, spontaneous and unconscious. For so far as our apprehension of the re-

<sup>1</sup> The example of the smooth lake may indeed be taken as a case of direct expression, suggesting by actual physical resemblance the calmness of a human face. Coleridge's *Winter* wearing "on his smiling face a dream of Spring" favours this interpretation. But the soaring mountain, and all beauty of line and outline, seems to rest on the principle explained above.

semblance between the natural and human form (*e.g.* between a bent tree and a bowed human frame) involves an act of conscious comparison, our æsthetic pleasure in the object is incomplete; for this pleasure rests upon a complete self-identification of the observer with the life which he observes, with which the acts of conscious recognition of meaning must inevitably conflict. This recognition is therefore unconscious and independent of the will of the observer. From this it must not be inferred, however, that it is also independent of idiosyncrasies of mind and temperament. On the contrary, the power of perceiving those resemblances, and throwing ourselves into the life which they symbolise or suggest, varies incalculably in different individuals, according to the degree of imagination and sensibility with which they are gifted. And here the associative process is but the necessary condition, the machinery subservient to the activity of these higher powers, whose effects it is of itself no more competent to call into being than the lyre could of itself evoke the music which is conjured from it by the hand of genius.

Hitherto we have been discussing those species only of artistic expression, which are grounded upon a natural relation, or upon the mimicry of that relation. But there are other instances of objects possessing, or appearing to possess, the peculiar charm of beauty, in which the relationship of the sensuous form to the ideal content which it embodies is of another kind. With regard therefore to these, we have to consider first, whether their claim to beauty is spurious or not; secondly, if that claim gains our assent, to what extent the power of the form to express the spirit is due to mental association.

In our analysis of the phenomena of association in the first part of this paper, we saw that the association of ideas in the mind sometimes corresponded to a connexion of objects in Nature, but sometimes did not. On this account association is a not infrequent cause of delusions. If A and B constantly recur together in a man's mind, he is tempted to believe that *in rerum natura* also they are necessarily and universally connected. A further delusion is possible; not only is our apprehension of any particular outward experience necessarily very imperfect and fragmentary, but the image which it leaves behind on one mind will differ widely from that which it leaves behind on another. To one man the nightingale's song, heard among the most prosaic surroundings, will be inevitably reminiscent of all the witchery of a summer evening; the thrush's note will recall the hope and promise of the awakening spring. To another their charm

will consist in their power of simulating or directly expressing certain human emotions. To a third their notes may recall pleasures incident indeed to the season in which these birds are vocal, but pleasures of a kind wholly inartistic ; yet we cannot but say, that these pleasures come to them through, if not in, the music of the song. Now which of these three persons is partaking of a genuine æsthetic enjoyment ? or to put it otherwise, which of them do the songs please by virtue of their genuine quality of beauty ? That quality we defined, earlier in this paper, as the power of sensuous expression, agreeing, however, that the term *expression* in this definition needed to be qualified in certain ways, and that the surest test of this qualification being realized in any particular object was a subjective test, consisted, that is, in the capacity of the object to affect us in a certain manner. To return to our example. In the second case, the pleasure evidently falls under that class of natural expression which we have already considered and in which we have found the conditions of beauty realised. Take now the case of the first person. Here the bird's song acts evidently by the power of suggesting a complete environment—of recalling a host of images and impressions. It calls up the spring to us. How far then does it satisfy the conditions of expression, objective and subjective ? Let us first ask, What is in this instance the relationship of form and conveyed content ? Obviously it is not the direct casual connexion which characterised the first type of expressiveness. The lark, it is true, sings under the influence of the same great force which re-clothes the earth in greenness and sunshine, and in so far as we feel that force only in its song, we do not stretch its powers of expression beyond their natural borders ; but what if it evokes in us the joy which we have experienced in the warm sunshine and the freshly-opening flowers of spring ? This joy we feel not in, but *through* its song ; and the two prepositions serve well to distinguish the natural form of expression from that which we are now considering. There is, indeed, an objective and necessary connexion between the song and all those things for which the song stands ; they are all part of the one great natural phenomenon, the coming of spring. But—in so far as the connexion is not so direct and intimate as that of cause and effect—there is here a modification of the simple form of expression which we first considered.

Turning to the subjective aspect of this experience, we have a corresponding falling away from the perfect conditions of æsthetic pleasure. The connexion in nature being more

indirect and remote, the perception or the sense of that connexion will be both less universal and less spontaneous: it will depend upon the individual, and not only on his temperament (for this is true of all æsthetic enjoyment) but on his actual experiences. If all the sensations of all the days on which he has listened with joy to the lark's singing, of the other delights of ear and eye which accompanied that joy, are now unconsciously but inseparably blended in his present rapture, if they all contribute to make up that which the bird's song can mean—yet that meaning, though indisputably far richer and more complex than that which it conveys to the general listener, lacks universality, and his perception therefore has less claim upon the title of beauty, or true æsthetic significance, than the case which we have already considered.

The third case may be rapidly dismissed. Here the objective connexion between the song and the ideas which it excites is so external and extraneous that we evidently cannot speak of the song *expressing* these ideas without a gross misuse of language. For the same reason, such power of expression as it can be said to possess must be strictly limited, dependent as it is on an individual temperament, on individual interests in the hearer which make particular features of the total complex of experience of which the song formed a part, the source of a peculiar pleasure to him. These interests (which may be that of the huntsman or of the ornithologist) is afterwards unconsciously transferred to the song itself.

Hence we see that in the three cases we have been considering, the æsthetic pleasure derived from the lark's singing varies in purity and universality in proportion as the spiritual or emotional content, which is the source of that pleasure, is more or less *directly* expressed; and this again in proportion as the medium and the matter of the song are mutually determined and conditioned, not merely in the consciousness of the hearer, but in the physical world outside. In the cases which we considered last, this objective mutual determination was either not present, or only partly so. Its apparent existence to a certain number of minds is really the result of an unconscious self-deception, which causes indirect suggestion to usurp the form and influence of direct expression.

And this brings us to the part which association plays in the matter. Association, as we saw, may be the instrument of delusive reflexion, as well as a faithful imaging of the world of sense. In one sense, indeed, it is never deceptive.

There can be no mental association of impressions or images without a corresponding connexion of their counterparts in the world of sense. Association does not intentionally feign an impossible or a fantastic world. It seeks to do its work fully, but it is unequal to the task. Hence mental reproduction is always more or less fragmentary and ill-ordered, and therefore sometimes responsible for a strange mental reconstruction of the universe, a re-distribution of its component parts. Now that association is at the root of the phenomenon of beauty is a statement which needs some elucidation. It is evident that association being present in all reproductive activity of the mind, this assertion may be made of any form of that activity. Hence the phrase can only have meaning if by association we understand this process in its abnormal effects. And this is, in truth, the meaning of those who employ the definition. This is evident by a further glance at our three illustrations from the lark's song. In grasping this song immediately as the immediate expression of a joyous life, the mind evidently acts by the normal process of association, inseparably binding together things which in nature are inseparably united. But in order that this song should convey to us all the pleasurable emotions of a bright spring day, associations must be created in our minds which are no exact reproduction of real relations, in so far as they represent these necessarily inseparable things which are only occasionally connected. The lark sings on gloomy days as gaily as on bright, on the bleak moor *as* over the blossoming valley. But the misrepresentation becomes still greater when association causes us to attach to the lark's songs, as emotions directly rising from and embodied in it, the memories of pleasant occupations to which that music was originally only a diverting accompaniment. To explain æsthetic emotion, therefore, as based upon association, is either to mean nothing, or to base it on self-delusion, upon an involuntary distortion of fact.

This will, I believe, become clearer if we consider certain other instances of the expressed capacity of sensuous forms. In our analysis it appeared that while the most universal associations were those founded upon some natural connexion, yet the repeated conjunction of objects bound by no such relation might result in an association equally fixed and indissoluble. A new type of expressiveness is thus presented for our consideration, the most obvious instance of which is in the representative power of words, but which covers all varieties of signs and symbols which are partially, if not wholly, the work of the human mind. The question



arises, Does such symbolism fulfil the conditions of artistic presentation? Now the business of art, as we have defined and accepted it, is to embody in forms of sense the characteristic aspects of life in such wise that the apprehension of their meaning shall take the form of the immediate and comprehensive sympathy with the particular experience—immediate in the sense that no act of reflexion comes in to weaken the sympathy, and comprehensive, because the apprehension in question is no mere conceiving or understanding of it as something apart from us, but an ideal participation in its being. Now if these conditions are fulfilled where the relation between symbol and symbolised, form and content, is artificial and the creation of human wit, cannot such expression, although artificial, be none the less regarded as beautiful, in the widest sense of the word? The very existence of poetry, which uses words as its vehicle, would seem to answer the question in the affirmative, were it not that the growth of language both in the race and individual and in consequence the relation of specific words to specific contents of such objects is essentially a natural phenomenon, in which conscious purpose and intelligence plays, to all intents and purposes, no part. Words indeed have no *raison d'être*, except for the purposes of language. Besides this, it is not the words themselves, but the images and things for which they stand, which are in poetry the true forms and media of expression; there is here, in fact, a double process of symbolisation. But it is in the case of objects, which, having an independent existence of their own, are arbitrarily employed by the mind as signs or symbols of other objects, that the above question must be asked. And in respect of these the conclusion is unavoidable that if such forms could excite æsthetic enjoyment in all its completeness, the fact of their artificiality would have nothing to say; but that they cannot, as a matter of fact, produce such an effect, and this for a reason which is closely bound up with their artificial and arbitrary nature. For such symbols being the work of the intellect, appeal to the intellect alone, and serve but to call up the bare notion of that for which they stand. This is the incurable defect of allegorical art, and the source of its inevitable inferiority to the art which imitates nature. The representation of Death by a skull and cross-bones, or by the mower with his scythe, suggests but a single aspect or attribute of Death, and familiarity with such a symbol serves to make it less rather than more concrete, so that in the end it comes to present little more than the simple idea to the mind. But Death, as portrayed or contemplated in a single

definite instance taken from experience, is evidently a very different matter. Liberty again may be designated by a red cap; but apart from the fact that such symbolisation can only reach those who have been familiarised with it by repeated associations, even in these it cannot be a source of genuine æsthetic enjoyment, such enjoyment as would be derived from the contemplation of one of the many forms in which the aspiration after freedom, or the sense of its attainment, manifests itself in the human heart. And thus it is that the true æsthetic value of such allegories as the Pilgrim's Progress lies not in the skilfulness with which the allegory is handled, but in the power of the writer to interest us in the character and fates of the *dramatis personæ* as human beings.

It is evident then that expression by means of an arbitrary sign or symbol can never wholly fulfil the conditions of artistic presentation or fully earn the title of beauty. Here then appear clearly the limits of the power of association as a cause of æsthetic experience. The æsthetic appreciation of such forms as owe their expressiveness to the operation of this principle, must always fall short if not in directness and spontaneity, yet in fulness and intensity, of our enjoyment of forms whose significance is founded on a natural relation. Conversely, the title of expressive in the full sense of the word must be denied to all forms whose unity with the content they express has its sense and existence not in the constitution of the external world, but in the mind of the observer.

There remains one other type of expression to be discussed—a type the imperfect analysis of which has created a serious misconception with regard to the nature of beauty. It is frequently asserted that our sense of beauty in an object is nothing more than our perception of its fitness for a particular purpose. Now the theory, stated in this crude form, is so obviously false as to need nothing more than a bare confutation. Beauty is not utility; to perceive that an object is useful to this or that end, and to be conscious of its beauty, are evidently wholly distinct ways of regarding it. But our perception of its utility for a particular end, an end which is before our mind, and our consciousness of design, of purposiveness, of rationality in fact, as expressed in the form of the object, are equally distinct from one another; and this latter attitude of mind may justly be regarded as æsthetic, for it is the contemplation of a mental content embodied in a sensuous form. This is not to concede that the expression of general design or purposiveness actually constitutes

beauty; for beauty is the expression of character (in the widest sense) and character embraces far more than adaptability to an end. Indeed, the more a thing appears as an end in itself, the more significant does its character appear; while qualities, which viewed teleologically are negative rather than affirmative, are yet capable of æsthetic presentation. This, however, is somewhat beside the point: what here concerns us is the truth, that adaptation to design, as a property of a given object, may be a true source on the one hand of beauty, and on the other of æsthetic enjoyment. In what sense then, it will be asked, can the object fitted by man or nature for a particular purpose, be said to *express* design or purpose? What is here the relation of form and content? Without attempting a definition of scientific exactitude, we may be content to emphasise the fact, that the relation is founded on the nature of the object, not upon an arbitrary association of the mind. An object is capable of expressing utility because it is useful, because that is, some power has been at work upon it with the aim of adapting it to some particular end. Now at first sight it seems as if the content in such a case were not the force which lies behind the object, the force which has formed it and of whose activity its form is the outcome and expression. Here the content at first sight seems to be an idea, pure and simple; and the relation of the form to its content, that of the particular example to its general principle; a relation, however, not reached by the effort of a comparing intellect, but by an act of immediate apprehension. Yet here too we should probably be more correct in regarding the content, as life expressed upon form, whether that life be, as in the machine, the designing intellect of man, or, as in the mechanisms of Nature, the informing intelligence which they inevitably suggest. It is, then, the direct expression of life, that we admire and sympathise with in works of design, in so far as we contemplate them æsthetically. This distinction will become palpable when we consider the double kind of pleasure which a work of art may inspire in us; on the one hand, the delight in it as an expression of that which it definitely sets forth to express; on the other our appreciation of it, apart from its inner significance, as a revelation of skill, of purpose, of human intelligence. For only the latter form of æsthetic pleasure can be afforded by a work of pure utility.

The part played by association in this last type of expressiveness is instructive. To admire the designing mind in its handiwork we must evidently understand that handiwork, and the more intimately familiar we are with it as a piece of

mechanism, as a means to a distinct purpose, the more capable we shall be of a just and discriminating admiration. Yet there is a danger that this very knowledge may defeat its own purpose. For it may cause us to concentrate our attention upon the particular qualities of shape, or texture, or whatsoever it may be, which make this special object pre-eminently suitable for this special purpose; and therefore exclude that attitude of mind, which regards it as the embodiment of a principle, or rather as the sensuous presentment of conscious and designing intellect. Now the natural process of association in the mind of one definitely and clearly instructed by frequent experience as to the use to which a particular instrument was meant to be put, would be, that the sight of the instrument should call up the memory of its function, and engross him in the contemplation of it; which, if its organisation were of a complex nature, would, by involving him in a detailed contemplation of the parts, exclude a comprehensive vision of the whole. But it is just this comprehension and direct vision which is a necessary ground of the true æsthetic attitude. Hence for this attitude to be taken, we require that the associative process must not be consummated, but rather weakened and curtailed; the mind must rest satisfied in the recognition of the general principle, and desist from the pursuit of the particular application.

This brings us to a matter which, though hitherto but incidentally handled, is perhaps the true objective of our inquiry; the association theory of beauty *par excellence*. In examining this theory we find that what its supporters credit to the process of association is really due to a defective operation of that principle. The origin of the sense of beauty is explained by them somewhat after the following fashion. On the partial recurrence of any experience (A B C, let us call it) there is a tendency for the whole, or for other parts of the whole experience, to be recalled at the same time to memory. If A, for instance, recurs in actuality, B or C or B C may recur ideally. But A, B and C each have, or may have, their specific accompanying experience of pleasure or pain (feeling-tone, as it is called), *a*, *b* and *c*. Now it may happen that A, on its recurrence, fails indeed to recall B or C but brings with it, besides its own feeling-tone *a*, the pleasurable or painful feeling *b* or *c*. If *b* was originally much stronger than *a*, it will overpower *a* in the recurrence, and thus come to be regarded as the true adjunct and property of A. But while its association with A is thus regarded as inevitable, it is at the same time inexplicable, or at least incap-

able of explanation as the natural effect of A. Having forgotten our original experience ABC, we cannot understand why A is accompanied by *b*. Hence, being unable to refer *b* to any of the known qualities of A, we end by coining or inventing a new property, which we call beauty, and to this we attribute the feeling *b*.

Thus beauty is referred to a delusion, and association (but, be it observed, *defective* association) is made the instrument of the deception.

Such is, briefly, the association theory of beauty, which was much in vogue in England during the eighteenth century, and still has its supporters. The refutation of it may be either empirical or *a priori*. We may point, as Hutcheson and Coleridge after him have pointed, to the acknowledged beauty of objects which associations have rendered repulsive rather than pleasing; and, on the other hand, to objects, which, pleasing on account of associations, would be denied any claim to beauty by the general taste of mankind. But a more convincing refutation has appeared in the course of the present inquiry. We have agreed that beauty lies in expression, and we have seen that there can be no true artistic expression save where the form derives its meaning from some necessary and objective relationship to the content, that is, where that meaning lies in the nature of the object, constitutes in fact its *raison d'être*, and is not affixed to it by an arbitrary act of the mind. But the explanation of beauty now before us does not fulfil these conditions; not only is there no vital relationship between the form and that which it expresses, but there is here no question of expression, in the sense to which we have restricted the term, at all. For the beauty of an object, according to this theory, consists in its power of renewing in us a pleasure previously experienced apart from the circumstances which gave rise to it. The test, in fact, of the presence of beauty in an object is its power of communicating a particular kind of pleasurable feeling, a power which it derives from nothing in its own nature, but from the coincidence of previous connexion with another object or circumstances possessing that power. The theory, in fact, annihilates beauty as an actual property of objects. But the truth is that the pleasurable feeling which we derive from beauty (if pleasurable it can always be justly called) is wholly due to expressive capacity of the object, and arises in proportion as the object exercises this power; that is, in proportion as we are forced to abandon ourselves to, and to absorb ourselves in, the life which it expresses. But according to the associationist, objects are

beautiful not in so far as they express an intellectual content, but in so far as they recall a pleasurable feeling.

I have now, I think, discussed the chief forms of true and spurious artistic expression, and the degree to which each form is dependent upon association. And the conclusion reached is this. In the first place, considered as a normal activity of the mind, association is indispensable to the apprehension of any sensuous form, as *expressive*; that is, unless certain associations are aroused in the mind of the beholder, no object however beautiful in itself can inspire in him the sentiment of beauty. So much we may allow, without committing ourselves by one step to the position of the associationist. For having agreed that certain processes of association must necessarily be, as it were, set working in the apprehension of beauty, we have still to ask, How it is that while in some minds these processes are put into activity, in others they are not? Association is after all but a portion of the mind's intricate machinery, and to see in it the true source of any aspect of our emotional life, is no more reasonable than to regard the eagle's wings as the cause of its swift flight, or the wires and other apparatus connected with the telegraph as the cause of our early knowledge of events which happen in distant continents.

So much is true of association as an accurate witness to reality; true, that is, of cases where its processes correspond to and subserve the actual connexions of things. But we have seen that this accuracy is not always achieved; that association often gives rise to connexions in the mind which have no real counterpart, and thus lends to objects a significance and an import, and consequently a capacity for expression, which has no basis in nature. In such instances association may more justly be regarded as the *cause* of this capacity and not merely its condition. But an expressiveness which is purely subjective fails, as we perceived, for various reasons to fulfil the conditions of a complete æsthetic experience. Such experience demands in the object the prior existence of certain definite qualities; in the subject, of a definite mental attitude or disposition. And it is not enough that these qualities of the object should be *feigned* to exist in it; their existence must be real and independent. But association merely feigns that existence, and feigns it, moreover, but roughly and imperfectly. Hence it cannot be justly held as a determining ground of æsthetic significance, nor the specific emotion which it attaches to objects as the differentia of æsthetic pleasurableness.

The fact that the artist, and more particularly the poet,

relies to a large extent upon the operation of the associative principle in the minds of his audience, is in no sense antagonistic to this conclusion. In his restrained and selective use of imagery, the true poet aims at combining the minimum of distinct sense-presentation with the maximum of imaginative and emotional suggestion. But the associations which he counts upon exciting, are such as he has himself discovered, by frequent or intense experience, to be naturally and inherently allied to those salient features of his experience which he is content to reproduce. Take Keats' lines:—

The same that oft-times hath  
Charmed magic casements, opening on the foam  
Of perilous seas, in faery lands forlorn.

Here the poet could not have said more, without in some way fettering our imagination; he could not have said less, without failing to stimulate it in the degree intended. How far the reader's imagination actually fills up the details of the picture, how far it is content with the mere sense of stimulation and awakened power, is a nice question; but, however that may be, there can be no doubt that while upon association, or, if we prefer so to put it, upon preformed associations, the poet relies for producing the desired æsthetic effect, these associations are themselves founded upon an objective and necessary connexion of things. Thus association still remains no more than the means and instrument of an activity, whose real business is the concentrated expression of life and nature. Association is, in fact, a useful, indeed an indispensable servant; but a servant who, as we have seen, once admitted to the privileges of master, may substitute chaos and illusion for a true and ordered insight.



## V.—CRITICAL NOTICES.

*Plato's Doctrine of Ideas.* By J. A. STEWART. Oxford: Clarendon Press, 1909. Pp. 206.

It is gratifying to the student of Plato that Prof. Stewart should have followed up his delightful book on the *Myths of Plato* by a work in which he gives us his interpretation of the Platonic εἶδη as a contribution to the methodology of science. Since I am inevitably bound to devote most of the space at my command to a discussion of points in which I find myself obliged to dissent from the author, I would say at once that there is very much in which I find myself in accord with him, and that I owe him a special debt of gratitude for the kindness which he has shown to some of my own past attempts to elucidate Plato's thought. In particular, I find the crude interpretation which treats the εἶδη literally as ghostly "things," of which the "things" we see and touch are, so to say, bad photographs, refuted by Prof. Stewart in a way which I think it would be hard to improve upon. And I should like particularly to call attention to one remark, which I should hardly hesitate to call the most important sentence in the whole book, "μέθεξις is really predication" (p. 77). This, to my mind, goes very close to the root of the matter, and my only doubt is whether Prof. Stewart can be right in saying that Aristotle "did not see" this when he tried to justify his secession from the Academy by formulating his well-known collection of polemical arguments, old and new, against the εἶδη. I suspect that the truer way to describe his attitude would be to say that he did see it, but also saw that the Platonic formula involves a peculiar theory about the "import" of predication which is not his own. To put it baldly, may we not say that Aristotle regards the connexion of attribute with substantive as ultimate for logic and metaphysics? *A is a B* means '*B* is predicated of *A*,' and that is all there is to be said about it. The doctrine of μέθεξις, on the other hand, seems to imply that that is *not* all there is to be said; if *A* has an adjective *B* predicated of it, this implies a metaphysical theory about the relation of *A* to a certain entity which is not adjectival. Thus, when I say "Socrates is wise," the ground of my assertion is a relation between Socrates and 'wisdom,' and 'wisdom,' though not a "thing" is also not a predicate or adjective, but a quasi-sub-

stantival entity. In other words, Plato is definitely a "realist" in the original and proper sense of the term, and hence his position can never be made quite intelligible by an interpreter who, like so many modern logicians, including Prof. Stewart himself, is a "conceptualist". But more of this directly.

If I should try to characterise Prof. Stewart's general attitude towards Plato's thought quite generally, I think I could best do so by saying (1) that in the main he is at one with Natorp in seeing in Plato an epistemologist of the type of Kant, and in the εἶδη an almost exact anticipation of the "Categories of the Understanding," though one of them at least, "the Good," is held always, and others in so far as they are treated mythically, to recall the "Regulative Ideas" of Reason, but that his view is further complicated (2) by a desire to defend Plato against the denunciations of Prof. James and Dr. Schiller by treating the "categories" themselves in the Pragmatist fashion as mere "points of view" which we find it "convenient" to take in dealing with sense-experience (see particularly pp. 38, 100). Further, like most current interpretations, Prof. Stewart's goes (3) on the assumption that the doctrine of εἶδη is from first to last the invention and peculiar property of Plato, and that it is thus necessary at least to raise the question of a possible difference between an "earlier" and a "later" Platonic philosophy. In my own opinion, no one of these assumptions is tenable, and the making of any one of them is bound to lead to a forced and unnatural exegesis, while (3) the only one which can be confronted with actual testimony, is directly contradictory of all ancient evidence including that furnished by Plato himself. But before I deal with these fundamental points, I may be allowed to refer to one or two important matters in which Prof. Stewart, as it seems to me, prepares the way for a false interpretation by actual misunderstanding of the Platonic text. The most important of these cases are two, the treatment of the passage about the δεύτερος πλοῦς in the *Phaedo*, and the explanation of the famous statements of the *Republic* that the Good is ἐνι ἐπέκεινα οὐσίας καὶ ἀληθείας, and that it is not γνῶσις. First as to the passage of the *Phaedo* (99-100). Prof. Stewart, like many other interpreters of Plato, supposes a contrast to be intended between an ideally best kind of cosmology, which consists in direct deduction of the whole details of existence from the notion of the Best or Good, and the method of procedure by λόγοι which are ἐποθέμενος as actually adopted by Socrates. Thus he writes (pp. 96-97), "It seems to be held that though explanation of Being and Becoming by means of the Good, or ought-to-be, (the final cause,) is the best explanation, yet there is another kind of explanation with which we must be satisfied . . . , explanation by means of the Idea (formal cause) in which the phenomenon to be explained 'participates'. . . . When, however, the proximate law has been so affiliated [i.e. to a higher law], and is at last seen to be deducible from ἰκανόν τι, the explanation is in-

deed *scientific*, but as Plato insists on contrasting it with that by means of the Good, we must suppose that he regards it as lacking something—it is ‘mechanical,’ not ‘teleological’. In the *Republic* and *Philebus* he seems to see his way, as he does not in the *Phædo*, to making a scientific use of teleology.”

This explanation, which agrees with that of Natorp, seems to me to be due to a dangerous misunderstanding. The contrast which is in Plato's mind is completely misrepresented, as may be seen by comparing the account in the *Phædo* of the process by which one arrives at the *ικανόν τι* with the description of the ascent of ‘dialectic’ to the Good as an *ἀρχὴ ἀνυπόθετος* in *Republic*, vi. (and note that to be *ικανόν* is a *proprium* of Good also in the *Philebus*). The comparison, I believe, makes it certain that the method of studying *τὰ ὄντα* in *λόγοι* spoken of in the *Phædo* is identical with the “dialectic” of the *Republic*, and the *ικανόν τι* with the Good. The real contrast which Plato intends in the *Phædo* is, as the words of 99 *e*, *βλέπων πρὸς τὰ πράγματα τοῖς ὁμματι καὶ ἐκάστη τῶν αἰσθήσεων ἐπιχειρῶν ἀπτεσθαι αὐτῶν*, show, between deduction of consequences from *λόγοι* (which ultimately involves deduction of them from the Good), and the method ascribed to the early cosmologists of basing an explanation of things upon analogies (*cf.* 92 *d*) drawn from immediate sense-perception (such *e.g.* as the rival analogies of a body whirled round by a string, and of the formation of an eddy in water, which play so prominent a part in early Greek Physics). The contrast is not between what Socrates accomplished (or what Plato thought feasible when he wrote the *Phædo*), and what Plato thought possible in his later days, but between the methods of Socrates and those of his predecessors. Where Natorp and Prof. Stewart go wrong is in neglecting to consult the dictionary about the meaning of *δεύτερος πλοῦς*. What it means is not, as their explanations imply, an “inferior,” but simply a more difficult method. As the quotation from Menander actually given in Liddell and Scott to illustrate the phrase shows, the *δεύτερος πλοῦς* is, literally, getting out of port with your oars when the wind is against you, and does not permit the easier method of sailing out. You try to sail with the wind in the first instance because it is easier to do so, not because the intended result is not equally effected by the “second” method of navigation. The procedure of the *Timæus* is just as much a *δεύτερος πλοῦς* as that which we are told by the *Phædo* Socrates fell back on; in fact, the two are identical, except that the *Phædo* does not actually go on to apply the method of *σκέψις ἐν λόγοις* to cosmology, as the *Timæus* does. What both dialogues teach is that rigid deduction from postulates which have finally themselves to be justified by their connexion with the “Good,” or world-purpose, is, hard as it may be, the only philosophical way to the understanding of what is. Let me add that the whole conception of this “dialectical” method is no invention of Plato, but belongs to the historical Socrates, as may be

seen by comparing the account of the use of *ὑποθέσεις* in the *Phædo* with the invaluable statements of Xenophon in *Memorabilia*, iv., 6, 13-15.

A similar grave misinterpretation, I should say, is responsible for the momentous conclusion of page 51, that the "Good" because it is the principle of *οὐσία* and *ἐπιστήμη* is not "an object of scientific knowledge". It would be strange if Plato held this view, since he himself makes acquaintance with the Good the culmination of knowledge, and requires the deduction of all other knowledge from knowledge of It. And the existence of such a dialogue as the *Philebus* or of the lectures "about the Good" would be no less an anomaly. But the fact is, I think, that Prof. Stewart has obtained his result by misinterpretation of language. What Plato says is simply that the Good is not "knowledge" (as was assumed by those who identified it with *φρόνησις*). But it does not follow that what is not knowledge cannot be a known object. In fact the parallelism between the Good and the sun requires that the Good *shall* be such an object. The sun, too, is neither vision nor light, but the cause of both, yet it is also itself one of the things which are seen by its light, and it is implied that even so "in the intelligible realm" the Good makes itself as well as everything else knowable. It is "more than science," since it is the source of the truths I know, no less than of my knowing, it is "more than fact," since it is the source of my power of knowing fact, but this does not prove it unknowable. In a word, here, as in Prof. Stewart's conception of the function of myth in Plato, I think I trace the influence of the specifically Neo-Platonic notion of symbolism as the only means of apprehension of the highest truth. With Plato, if I am not mistaken, symbolism has quite another value. It is the appropriate method of dealing with the world of incalculable change, which cannot be properly known, not because it is "above" but because it is "below" knowledge. *Timæus* (29 b-c) surely disposes once for all of the theory that the Good, which is the reality of all realities, can only be apprehended in symbol. Compare the admirable remarks of Hegel on the point (*Geschichte der Philosophie, Werke*, xiv., 188-190). One more matter of "anti-quarian" detail, before I pass to considerations of a more general character. Any discussion of the drift of the *Sophistes* and *Parmenides* requires a decision about the identity of the *εἰδῶν φίλοι*, the half-*Eleatic* thinkers who denied the reality of the sensible world *in toto*, and whose views in some way are manifestly kept in mind throughout the *Parmenides*. Prof. Stewart decides that they are pupils of the Academy who misunderstood their master's imaginative language about the "realm" of the *εἶδη*. I feel bound still to maintain that they are predecessors or older contemporaries of Plato, and that all the scanty evidence we have points to Euclides of Megara as at least one of the persons in question. Of course, it was possible for Plato to compose a "Socratic"

discourse in which the opinions of his own pupils should be canvassed, and the evidence supplied by Aristotle makes it clear that he has done so in the *Philebus* where the opposing ethical theories about the worth of pleasure can be identified as those of Speusippus and Eudoxus. But the case of the *Philebus* presents a very interesting peculiarity. Very little is said, after the opening of the dialogue, about the εἶδη. It is admitted on both sides that there are such "units" and that they are at once ones and manys. But the rest of the dialogue deals not with them but with certain concrete facts of psychology and moral life. Any careful reading will show *e.g.* that the true answer to the question where the εἶδη come in the fourfold classification is that they do not come into it at all. It is a way of dealing with τὰ νῦν ὄντα, with γενέσεις εἰς οὐρίαν, and only indirectly throws light upon the organisation of the system of pure concepts, as indeed Prof. Stewart seems to see. This at once suggests the question whether it is likely that the students of the Academy were to any great extent set to discuss the "Ideal Theory" at all. As far as any evidence of the nature of their studies can be derived from contemporary allusions or from their subsequent careers, they were not. The actual work supplied to them seems to have been chiefly the development of the various branches of mathematics and the solution of "problems" in astronomy. (The famous astronomical hypothesis of the concentric "spheres" of which Aristotle, to the incalculable injury of science, made such a mess, appears to have originated as the solution of one such "problem".) The probability is that the pupils were already supposed to know about the εἶδη in a general way from their acquaintance with literature, especially with Plato's own writings. To be sure, Plato is known to have lectured about the "Good," but we know also that this lecture was mainly concerned with the philosophy of mathematics, and the programme of *Republic*, vii., reserves serious contemplation of the Good for the evening of life. Thus the antecedent likelihood would seem to be entirely against the view that Plato spent his time in composing dialogues about εἶδη for the special benefit of his own pupils. Moreover, the nature of the doctrine ascribed to the εἰδὼν φίλοι in the *Sophistes*, as well as the way in which those persons are spoken of, indicates that Plato is dealing with persons of an earlier time. They were persons about whom the young Theætetus might not be expected to know much, though the "Stranger from Elea" is well acquainted with their views διὰ συνήθειαν (248 b). This points at once to a connexion between the "friends of forms" and Eleatics who were contemporary with Socrates, and could be described as being of the "fellowship of Parmenides and Zeno". Moreover, the doctrine ascribed to them is quite unlike anything we can suppose to have made its appearance in the Academy of the middle of the fourth century. They hold that "real being" belongs only to "certain incorporeal εἶδη," that the

sensible world is mere γένεσις (246 a), that we "share in γένεσις with our body through sensation, but in real being with our soul through reasoning" (248 a). In other words, they deny that sensation has any psychical side to it, and consequently hold that γένεσις is simply "what is not". They only differ from Parmenides in substituting for his solid spherical "One," the incorporeal εἶδη; their "doctrine of Ideas" is one which excludes μέθεξις. It stands to reason then that they represent a point of view much cruder than that of the Socrates of the *Phædo*, and that we must look for them among the persons whom Aristotle distinguishes from Socrates as "those who first said there were εἶδη" (*Metaphysics M.*, 1078 b) and about whose date he is silent. That they are older than Plato follows at once from the fact that in *Metaphysics M.* they are distinguished from their later successors who further held that εἶδη are numbers, that is, from Plato. (The popular explanation of the passage which finds in it a distinction between Plato and his successors is quite impossible, and owes its existence to the baseless assumption that no one had "said there are εἶδη" before Plato.) Now Euclides, of whom we know that he μετεχειρίζετο τὰ Παρμενίδεια, and denied the reality of everything which is opposed to "the Good," and of whom tradition recorded that he came from Gela, in Sicily, exactly fits this description, and it must, I think, be inferred that he is one of the εἰδῶν φίλοι, whoever the rest of them may have been.<sup>1</sup> In fact, it seems to me to be precisely this belief that Aristotle really has in mind when he says that whereas the persons who "first said that there are εἶδη," "separated" the universal from the particular, Socrates did not do so. (That Aristotle had any other source than the dialogues of Plato for his statements about the theories of Socrates will not, I think, be maintained by any one who cares to study his references to the views of Socrates as a whole.) If this is conceded, it follows at once that the "young Socrates" of the *Parmenides* represents neither Speusippus, nor the historical "younger" Socrates, nor any other member of the Academy, but the actual Socrates at that very stage of mental development which is described in the *Phædo* when he tells us how he betook himself to the δειότερος πλοῦς. It is instructive to observe that in the *Parmenides* the conception of εἶδη is represented as quite familiar to Parmenides and Zeno. They do not need to ask what an εἶδος is; what they do want to find out is whether the "young"

<sup>1</sup> The conditions would be fulfilled by any thinkers who held such a doctrine about the εἶδη as would be natural in persons specially connected with either Eleaticism or the Pythagoreanism out of which Eleaticism was developed. The intimate connexion of Socrates with Simmias, Cebes, Theodorus, and the Pythagoreans of Phlius is enough to account for Plato's acquaintance with a numerous band of such "friends of Forms". The point of real importance is simply that the persons meant are men of an earlier, not a later, time than Plato himself. We are thus delivered from the necessity of constructing an inherently improbable and historically unwarranted theory about the character of the Academy.

Socrates can, by his theory about μέθεξις, successfully bridge over the gulf which the doctrine of εἶδη described in the *Sophistes* sets up between the "Forms" and the sensible world. The problem is not, are there εἶδη, but what kind of relation is μέθεξις. The controversies with which both dialogues deal belong, in fact, to a time which already lay in the past when they were written, and it is only Plato's consummate dramatic art which conceals the fact. (Similarly with the doctrine of Antisthenes about predication which is examined in the *Sophistes*. It had been put forth long before, as we see from the *Euthydemus* and *Cratylus* and from Isocrates, and Antisthenes may well have been dead when the *Sophistes* was written.)

I am a little astonished to find Prof. Stewart treating so gently the extraordinary vagary of Jowett who suggests that the *ἰδέα τῶγαθοῦ* is an *aperçu* thrown out only in the one passage of the *Republic*. Prof. Stewart quite properly corrects Jowett's statement that "it is nowhere mentioned in his writings except in this passage". But he might have added that the "Good of Plato" was so well known as an example of something superlatively mysterious as to be made into a by-word by the comic poets, and in reply to Jowett's not very ingenuous remark that "it did not retain any hold upon the minds of his disciples in a later generation," it is worth while to observe that, as the writings of the old Academy have all but wholly perished, the assertion can be supported by no evidence, and that the polemic of Aristotle presupposes that the *Πλάτωνος ἀγαθόν* was a familiar thing to the public of the generation after Plato's death.

I come now to the consideration of the general prejudices which, as I have said, seem to me to have stood in the way of the author in his attempt to reconstruct Plato's thought. First as to the desire to conciliate Pragmatism. Prof. Stewart is, of course, right in protesting against the unintelligent caricature of Plato as a mere "Intellectualist," in any sense in which the term can fairly be used as one of reproach. If Intellectualism means simply the conviction that a philosopher's interpretation of life ought to be justifiable to the intelligence, Plato is in no worse case than Messrs. James and Schiller themselves, since they at least try to give us reasons why we should think their peculiar philosophy better than others. If it means that a philosophy has no other task than to construct scientific categories, and may ignore the demand that our moral and æsthetic and religious experience shall be treated as part of what is to be accounted for, it is simply ridiculous to give the name "Intellectualist" to the one great Greek thinker who is resolutely determined that Philosophy shall be made the basis for the practical regeneration of society. Irreverences of this kind are best treated with a pitying silence. I am exceedingly sorry that Prof. Stewart should have so far condescended to take account of them as to declare that the Platonic εἶδη are merely "points of view" which it is "convenient" to take in dealing with sensible fact, or outlooks



"peculiar to human nature" (pp. 45, 38, etc.). Whatever the εἶδη were, it is quite clear (1) that they are not "points of view" which can be said to be specially connected with "human" nature and "human" needs. A conception of this sort would amount to a reassertion of the ἀνθρώπος μέτρον doctrine, and it is Plato himself who tells us that not ἀνθρώπος but θεός is the true μέτρον (*Laws*, 716 c), and that true knowledge belongs to "the gods and a very few men". (2) And it is also clear that knowledge of the εἶδη is no mere "convenient" point of view but the one and only right "outlook," as Prof. Stewart himself repeatedly says when he is not writing with the fear of the Pragmatists before his eyes. Similarly, I think it is an uncalled-for and unwarranted concession to assert that the *Theaetetus* recognises a fundamental distinction between "mathematical and logical categories," which fall under the general head of "Being," and "moral and æsthetic categories," which fall under the head of "Value," on the strength of the passage quoted from *Theaetetus*, 186 c, at page 66. οὐσία and ὠφέλεια are not here contrasted but coupled and identified by τε καί, and the whole notion of there being any real distinction between the two sorts of categories is refuted by the simple consideration that with Plato Ethics is always a science of "number, weight, and measure"; the "mathematical" and the "moral and æsthetic" categories are in the end unified by the foundation of both in the notion of τὸ μέτρον or σύμμετρον. Ethics is, as the *Philebus* teaches us, the science of the health of the soul, and the health of the soul, like that of the body, depends in the last resort on the establishment of the proper combination of ἄπειρον and πείρας. It is the task of the legislator to bring about this combination whether, as in *Republic*, ii.-iii., by an education which duly tempers high spirit with intellectual flexibility by a combined training in "music" and "gymnastic," or, as in the *Politicus*, by marriage arrangements which "interweave" the two strains so as to produce the right kind of offspring. "Geometrical equality" is the foundation of right living no less than of the cosmic order.

Next as to the general view, in which Prof. Stewart agrees with Natorp, as to the correspondence of the leading εἶδη as regards their function with the Kantian "categories". With much of what is said it is impossible not to agree. It is perfectly true that one function of the εἶδη is to render "experience" in Kant's sense of the word possible, as is shown by the simple consideration that there are no εἶδη which are not "participated in" or "imitated by" αἰσθητά. And this side of Plato's doctrine is admirably put by the author, e.g., in his analysis of the account given by the *Cratylus* of the εἶδος of a shuttle. Further it is an excellent point to urge in refutation of the singular Jackson-Archer-Hind view of Plato's development that the supposed final restriction of εἶδη to biological "kinds" deprives them of that epistemological function of "making knowledge possible," which is given in the

*Timæus* itself as the reason for asserting their existence. But I should maintain that the difference between Plato and Kant is at least as marked as the agreement, and that Natorp and Prof. Stewart go wrong by attending only to the agreement. That there is a vital difference may at once be seen if we recollect that with Kant the doctrine of the categories is expressly intended as a solution of the question how "natural science *a priori* is possible," whereas, according to Plato, natural science, in the sense of a knowledge of rigidly universal laws of physical process, is not possible at all. All science is knowledge of εἶδη; cosmology, precisely because natural processes are influenced not merely by the εἶδη but by an incalculable variable factor, the ἀνάγκη or πλανωμένη αἰτία of the *Timæus*, can never be more than a "likely story". Plato's doctrine, in fact, leads straight up to the "descriptive" view of physical science, whereas Kant's leads straight away from it. And so the identification of the εἶδη with "natural laws" seems to me to contain as much error as truth. Its truth lies in the recognition that the εἶδη are not things, but the types of organisation or behaviour to which things (in so far as the actual forms an ordered world) have to conform. But, since they are all based on "the Good," their character is throughout teleological; they are forms of order imposed on things by the unity of purpose which holds the universe together; they are not "laws" of the kind which the Kantian "categories" are devised to justify, uniform and unbroken regularities of sequence, for Plato expressly denies that such rigid uniformity exists. To go rather deeper into the difference, I think Prof. Stewart's habitual description of the εἶδη as *instrumental* concepts seriously misleading. The εἶδη may, no doubt, discharge this function, the only one which Kant's categories possess, but they are for Plato primarily no mere *instruments*; though not "things," they are essentially not *instruments* by which we think, but *objects* of which we think. This is what I meant by saying some paragraphs back that Plato is strictly a realist. The "universal" or "common nature" is for him no mere "human" point of view; it is an object of knowledge, with the reality which belongs to such an object. To say that it is not a "thing" is merely to say that it is not itself a member of the class to which it stands in the relation of being their "common nature," not to deny its genuine objectivity. Hence I cannot find one vestige of support in Plato's language for the view ascribed to him by Prof. Stewart that the εἶδος is put into things by the mind, is a "product of mental activity," an implement by which our mind "makes nature". The standing presupposition is that the εἶδος is not put into things or made by our mind at all; it is something we find and do not create. Even in the *Timæus* the εἶδη are not "God's thoughts," in the sense of being states of God's mind, they are the objects which are before his mind in his construction of the visible world, and God no more "makes" them than the carpenter

makes the εἶδος of shuttle. (Hence I cannot see in the Platonic Demiurge a personification of the ἀγαθόν; the ἀγαθόν is represented by the αὐτοζῶον, and the Demiurge is simply a personification of the νοῦς which, as the *Philebus* tells us, is the "cause of the mixture".)

The fact is that Prof. Stewart is, like Neo-Kantians in general, a *conceptualist*, and hence he reads his conceptualism unconsciously into Plato. He converts the realists' objects of knowledge into something dangerously like mental processes of knowing. His motive is an excellent one; he wishes to protest against the confusion of the object of knowledge as such with an imaginary physical (or hyper-physical) "thing," but in his desire to avoid Charybdis he falls into Scylla. His conceptualism leads him in the end to subjectivism; the εἶδη become "*modes* of the activity of ψυχή" (p. 100, italics mine), a suggestion which is only made once in the whole of Plato (*Parmenides*, 132 b), and then only to be immediately rejected.

As to the remaining point, the assumption that Plato was the originator of the notion of εἶδος, I must dismiss it here very briefly, though I am convinced that it is an historical error which vitiates most current histories of Greek thought. Not only is there no real ancient evidence for the view, but we have against it not merely such testimony as is afforded by the history of the words εἶδος, ἰδέα, μορφή, but the explicit declaration of a writer whom Prof. Stewart seems to recognise (rightly, as I am convinced) as Plato himself. For the Platonic letters explicitly assert that the dialogues are discourses of "Socrates made young again and smartened up". If this is true, we are able to give due weight to the evidence (much of it has already been published by Prof. Burnet), which goes to show that *e.g.* the whole "Ideal Theory" of the *Phædo* actually belongs to the Pythagorean circles with which Socrates was closely connected, and to dismiss once for all the speculations which have been based upon the real or supposed disagreements between the "earlier doctrine" set forth in the *Phædo*, and the theories of the *Philebus* and *Timæus* and *Laws*. In fact, Platonism as a distinctive doctrine, going beyond the development of Socratic ideas, will have to be looked for almost exclusively in these latest dialogues.

In the present context I do not wish to raise the general question about the amount of Socrates' contribution to the theory of εἶδη, but merely to point out one or two of the more obvious errors into which the assumption that the theory was originated by Plato betrays its adherents. Prof. Stewart tells us that though the thing "dialectic" is to be found in the *Gorgias*, the "term διαλεκτική" has not been appropriated. Now we have the evidence of Xenophon to show that both the thing and the name were quite familiar to the actual Socrates, who, he says, held that men become "best and happiest and most able διαλέγεσθαι" by learning how to discriminate goods and evils κατὰ γένη, and that the practice of "sorting out

things" κατὰ γένη makes men "at once best, most competent to rule, and most dialectical" (*Mem.*, iv., 5, 12). So Natorp, quoted with approval by Prof. Stewart, supposes that in the *Gorgias* "Plato made his great discovery of logic as the Power which creates Science and reforms life," though the passage just quoted, together with the significant remarks about the Socratic use of *ὑπόθεσις* in *Mem.*, iv., 6, shows that the whole conception comes straight from Socrates. This is the real explanation of the highly developed logical terminology of so early a dialogue as the *Euthyphro*; Prof. Stewart should really not have repeated, in a way which does not altogether suggest disapproval, Natorp's fantastic assertion that so thoroughly characteristic a work is spurious. So again Natorp's remark that "Plato cannot have regarded immortality as proved by his arguments" in the *Phædo* involves an historical misconception. Plato had an argument which he regarded as proving immortality, the argument from the identification of the soul with the "self-moved," which he presents not only in the *Phædrus* (this would be inconclusive) but in the *Laws*; the arguments of the *Phædo*, which can be shown to be largely Pythagorean, are not given as his own, but as those which were current in the Socratic-Pythagorean group. Whether Plato thought them conclusive is a question which has no bearing upon his own convictions about immortality; probably, since he replaces them by the argument of the *Phædrus* and *Laws*, he did not. Another improbability which correct historical perspective removes, is the assumption which the author finds necessary for his theory of the part played by Socrates in the *Parmenides*. "As Prof. Natorp remarks," he says, "it is easy to understand how 'young Socrates' should play the part of a pupil of the Platonic school. These young pupils all aped Socrates" (p. 73). Where is the evidence that they did anything of the kind? There is none, unless Natorp may be accounted a witness to facts which occurred over two thousand years ago. Plato's Socrates, indeed, speaks of his young friends in the *Apology* as aping him, but this proves nothing about the young men of the Academy. How they spent their time has to be inferred partly from the contemporary allusions of the comic poets, partly from what we know of their mature achievements. And, as I have said, this evidence suggests that they were too busy with the higher mathematics and cosmology to have much time to spend in "aping" the peculiarities of a philosopher who had probably been dead some forty years before the *Parmenides* was composed. As a mere point of fact, I believe any one who sets himself to study the history of *εἶδος* as a philosophic technical term will be led to conclude not only that the meeting between Socrates and the great Eleatics is a fact, but that there is no anachronism in supposing that their conversation actually turned upon the use Socrates was learning to make of the *εἶδη*. The dramatic element is, in fact, as really present throughout the *Parmenides* as it is throughout the *Protagoras* or

*Phædo*. Even of the second part of the dialogue this holds good. The "antinomies" are, as Plato is careful to remind us, a close imitation of the actual manner of the historical Zeno, and the notions with which they deal, Unity, Multitude, Change, are exactly those which were studied by the historical Eleatics. So again, with some of the remarks which are made at page 79 about the difficulties urged in the dialogue against the "*μέθεξις-παράδειγμα* view" (I am delighted to find that Prof. Stewart rightly sees that it is one and the same view, not two incompatible views as the Cambridge school do vainly talk). The "*impasse*" that "knowledge of the pure objects" is impossible to us is not one discovered in the Platonic Academy; in its essence it is as old as Alcmaeon, an I, may we not say, even as Xenophanes? And, *pace* Prof. Stewart, it is precisely by the "*μέθεξις-παράδειγμα* view" that Plato proposes to escape from it. There is no thought in the *Parmenides* of renouncing the view; Parmenides himself most emphatically asserts its indispensability (135 *b*), and, indeed, on Prof. Stewart's own showing, to deny it would amount to denying the possibility of predication, since, in Plato's view at least, "no *μέθεξις*, no predication". The problem is not to get rid of *μέθεξις* but to clear up our notions as to what kind of relation it is.

To sum up, my general position is this: Prof. Stewart is clearly right in denying that the *εἶδος* is a "thing" in the vulgar sense. The "common nature" which pervades a class is not a member of the class. But, I should also say, according to Plato, this "common nature" is not a "human point of view," a mere "instrument" for dealing with the sensible things which "partake of" it. It is a concept, but a concept is just as objectively real as anything else. Or, if you like, it is a "type of order," but the "types of order" are not subjective, they are as objective as the elements which they order. "The circle" *e.g.* is neither a physical disc (indeed, Plato seems to agree with Leibniz that no physical disc is ever quite circular), nor yet any one of the "mathematical" circles which you could obtain by giving actual numerical values to the coefficients in its equation; it is a "type" of curve, a type of relation, but Plato does not, fortunately, hold the kind of conceptualism which looks on types of relation as the "work of the mind" imported into data which are not "the work of the mind," in the act of knowing. And hence he can hold, without any need for a theory corresponding to Kant's *Æsthetic*, that the types of order are never completely realised in the visible and sensible experience which suggests them to the mind. Indeed, if experience be taken in the sense which Kant puts on the word, we might even say that for Plato genuine knowledge begins where "possible experience" leaves off. It is well to insist on the point that Plato's purpose was not to deny the existence of the sensible, but to affirm it and make it intelligible, but no version of his philosophy can be final which eliminates from it the conviction that the sensible is not the whole of reality, any more

than any version of his social doctrines can be final which omits to show that they are saturated with the belief that "we have here no abiding city, but seek a city to come".

Much of what I have just said may perhaps seem to be forestalled by Prof. Stewart himself in the second part of his book. Here, by the aid of a striking, though perhaps not altogether convincing psychological analysis of the transcendental emotion of the artist and the mystic, he sets himself to show that from the point of view of "Contemplation" the *εἶδος* is everything which it is not from the point of view of the scientific intelligence. It is no longer an "instrumental" mode of the mind's activity, but is envisaged as an individual, as eternal, as coming from the "other world" into which we are momentarily lifted in the state of ecstasy, as "remembered" when we pass back again to the rough-and-tumble of practical life. Now one may gladly accept a great deal of the theory of the ecstatic experience which is expounded by Prof. Stewart with great beauty of phrase and felicity of illustration, and yet doubt how far the whole doctrine is relevant to the interpretation of Plato. Plato must, of course, like all imaginative artists—I had almost said, like all men—have had his moments of "vision," but the real question is how far his presentation of the *εἶδη* has been "contaminated," and made scientifically imperfect, by carrying over the results of imaginative vision into epistemology. And there are one or two considerations which ought to be borne in mind in dealing with this problem. One is that, as careful examination of the vocabulary will show, the famous passages of the *Symposium* and *Phædrus*, which are the chief Platonic texts for the "vision" theory of the Ideas, are permeated with language borrowed from the current mystical rites of Demeter and Orpheus. We must not hastily take for self-revelation on the part of Plato the "seer" what may equally well be psychological reconstruction of the state of mind of the Eleusinian "initiates". Indeed, I would even suggest that the mythical representative of the *εἶδη* is specially likely to be Socratic rather than distinctively Platonic, and that for two reasons. The liability of Socrates to the state of absorption essential to "ecstasy" is one of the most familiar and well attested of his peculiarities. And there is at least one contemporary allusion, in the *Birds* of Aristophanes, which it is hard to understand except on the supposition that Socrates was well known to be interested in just those mysterious "psychic" matters with which such forms of faith and practice as Orphicism were connected. (To say nothing of the *δαμόνιον σημεῖον* which points in the same direction.) Hence, if there really was a "St. Teresa" behind the Socratic-Platonic movement, I suspect the "saint" was no other than Socrates himself. One may add that it is precisely those latest dialogues which seem to reveal Platonism as finally matured that are most devoid of the "mystical" element. (Contrast on this head, the *Phædo* or *Symposium* with the *Philebus* or *Timæus*.)

Secondly, one important peculiarity of the "contemplative" attitude towards the εἶδη seems to me equally present in the places where they are handled with the greatest "scientific" precision. The "individuality" of the εἶδος is not, as Prof. Stewart seems to think, specially connected with its character as an object for mystical contemplation. It is equally true for the "scientific" use of it that it always is ἐν τι. I would say, in fact, that with Plato, though the "scientific" function of the εἶδος is to render predication possible, the εἶδος is never itself a predicate. It is not "wise," "go'po" "beautiful," but "wisdom," "the Good," "beauty" which are εἶδη. The relation of particular to εἶδος is always a relation between terms which are what Frege calls *Gegenstände*, terms which can never appear as predicates, and this is why the mistake of confounding εἶδη with "things" can be made so easily. And this individuality belongs from the first to concepts which are incapable of being envisaged in symbols which can support æsthetical rapture, to τὸ διπλάσιον, τὸ ἡμιόλιον and their likes no less than to τὸ καλὸν and τὸ ἀγαθόν. In general I think Prof. Stewart's psychology of contemplation, with all its charm, largely irrelevant to the study of Plato on the very ground that it is only applicable to what can be sensibly intuited. With Plato it is clear that whatever emotion could be associated e.g. with αὐτὸ τὸ καλὸν could be equally associated with αὐτῇ ἡ ἀλήθεια, but I doubt if this would be possible if Prof. Stewart's psychology provided the real explanation of Plato's alleged "hypostatization" of concepts. For the matter of that, I doubt if it really explains the raptures of the "saints". It applies admirably to Ezekiel's Cherubim and St. Teresa's Diamond, but not I think to the entirely non-sensuous "One" of Plotinus, nor to the "being than whom none better can be conceived" of St. Anselm. For they, from first to last, are pure concepts like the εἶδη. I doubt, therefore, whether any of Plato's statements about εἶδη really require to be explained as due to the "contamination" of science with "ecstatic contemplation". And I think Prof. Stewart would hardly have put forward the theory, at least as it stands, if he had not begun by crediting Plato with the conceptualist view of the νοητὸν as a mere "instrument". (Even the language about the νοητὸς τόπος, besides being based on Orphic mythology, which Plato certainly did not invent as an expression for mystical experiences of his own, has a close resemblance to the very unmystical concept of "intelligible extension" which we meet in the rationalistic thought of Leibniz and Herbart.) To justify Prof. Stewart's interpretation the εἶδος ought always to be, what Plato is constantly telling us it is not, *imaginable* as well as *intelligible*. It may be partly prejudice, but I find myself quite unable to believe that by that which is μῦθος θεωρὸν νῦν Plato means a "sensory-motor image" (p. 181), and the illustration given at page 183 of what Plato meant by ascribing an ὁ εἶναι to identity, equality, or justice by the record of a friend of the author who "visualises" the number-series as a slope down to a



dark ditch with a hill beyond is to my mind merely fantastical. That Plato was a "visualiser" may be true (though I believe actual empirical evidence is rather against the view that seers of visions, "seryers" and the like are as a rule better "visualisers" than other persons), but we have no evidence of the fact, and the details of his mythological geography seem to be taken over bodily from Orphic and Pythagorean sources, and thus prove nothing. Altogether, Prof. Stewart seems to me to err as a psychologist in the assumption that concepts are, psychologically, mental images. I feel confident that much of my own thought is carried on either without imagery of any kind, or with imagery which is found on attending to it to be merely irrelevant. And I am as certain as I can be about anything that "that 'fantastical' thing, the geometer's diagram," is not indispensable to thought about geometrical relations. So the Neo-Platonic experience of union with the "One" must be completely devoid of imagery, as Plotinus is always trying to make us understand; in *ἐνωσις* you apprehend the "One" by being it; the imagery of the radiating light, or the bubbling spring, is, as it seems to me, no part of the experience, but mere consciously and reflectively chosen symbolism, chosen to make the thing a little clearer by analogy to him who has not attained. And further, this *ἐνωσις* is not to be found in Plato; it is not in "ecstasy" that he places *ἐνωσις* *κατὰ τὸ δύναντον*, but in the life of active service.

For the realist the so-called "universal" is already itself an individual object of thought, though it stands on a different level from any of the "things" which "have" it as their common nature; it does not need to be *made* individual by the make-believe of reverie.

Incidentally, I may say, I am glad to find that in his treatment of the *Phædrus* myth which deals with the character of the "noble" *παιδεαστία* Prof. Stewart recognises that the whole treatment of the subject is dramatic and not autobiographical. (The notion that Plato is here giving us a piece of his own experience is as gratuitous as M. Verlaine's theory that Shakespeare must have been a murderer.) But I do not quite understand what he means by contrasting Plato's too sympathetic treatment of guilty love with Dante's. Dante, to be sure, puts Paolo and Francesca in hell, but his attitude as a man, as distinct from his attitude as a theologian, towards their conduct is surely, to quote Scartazzini, none too becoming in a man who was "nel seno della filosofia nudrito". And what is to be said of his sympathetic treatment of Ser Brunetto, or his elevation of Cunizza to Paradise? "Divine pity," says Prof. Stewart with reference to the case of Brunetto; I find rather absence of severe moral condemnation. It is, I think, for theological, and not for ethical reasons, that Dante can hold out no prospect of recovery of the soul's wings to his preceptor.

Yet another incidental remark seems worth while, in reference to the treatment of the *Symposium*. Like most interpreters, Prof. Stewart finds a contradiction between that dialogue and the *Phædo*

as to the immortality of the individual. But the alleged contradiction does not, I believe, exist. What the *Symposium* says is that *man* is not immortal. This is not denied in the *Phædo*, which professes to prove the immortality not of *man* but of his spiritual part, and expressly calls the time before the soul's birth into the body, the time "before we were *men*".

(As to the meaning of the *Phædo* itself, about which Prof. Stewart seems to feel doubtful, it ought to be clear that its object is to prove the deathlessness of the individual soul. The message of comfort which the dying Socrates leaves with his disciples is not that some souls or others will always exist, but that "our Master is not really taken from us". "I go to the Father," is the parting assurance of Socrates no less than of the Johannine Jesus.)

I may end this notice of a very suggestive book by condensing into a sentence the point of dissatisfaction which I feel in reading the second part of Prof. Stewart's Essay. Transcendental emotion awakened by recollection of a day-dream is an interesting and important topic for the psychologist, and what Prof. Stewart has to tell us about it is most instructive, but I am altogether at a loss to see why only images and not concepts should be charged with such emotion, or how the *εἶδος* employed by "dialectic" can be other than totally disparate with the *εἶδος* which is such an image. And after all, how does the image theory of the *εἶδος* as *παράδειγμα* square with the Platonic view that it is the things of sense which are the images which we behold as it were in a bad dream? Is the transition from *εἶδος* as "instrumental concept" or "point of view" to *εἶδος* as supreme reality really effected, when we talk of the "value" of our dream for Art and Religion, or is the impossibility of crossing the chasm merely concealed? If the dream has "value," is that not just because it is a "dream which is not all a dream"?

A. E. TAYLOR.

---

*Essays Philosophical and Psychological.* In Honour of William James, Professor in Harvard University. By his Colleagues at Columbia University. London: Longmans, Green & Co., 12s. net.

FRIENDS and lovers of William James will be glad to welcome this collection of essays, distinguished by their variety and independence, which are here brought together in neat and pleasant dress to do him honour. The volume is, as the prefatory note states, "intended to mark in some degree its authors' sense of Prof. James's memorable services in Philosophy and Psychology, the vitality he has added to those studies and the encouragement that has flowed from him to colleagues without number". The authors are all present or past members of the philosophical and psychological departments of Columbia University. They contribute thirteen essays in philosophy and some six in psychology. Just in

what the difference between the two parts of the book is constituted, is, however, difficult to grasp. It is true that the writers of the separate sections belong to different departments, that some of the psychological essays are larded with tables of figures, speak of experiments and make use of a vocabulary somewhat salted with terms borrowed from anatomy and physiology. But their subject-matter they share with philosophy (*cf.* "Pragmatism in *Æsthetics*," "The Consciousness of Relation," "On the Variability of Individual Judgments," "The Validity of Judgments of Character," "Reactions and Perceptions," "A Pragmatic Substitute for Free-will"); nor are the conclusions of the psychological essays less inconclusive than those in the philosophical ones. The book makes psychology appear as experimental philosophy and philosophy rather barren without that record of observed fact which makes the psychological portions seem, on the whole, somewhat weaker.

The substance and manner of both parts, however, are sufficiently weighty and distinguished. The independence of each other which the writers manifest is such that a satisfactorily continuous summary of the opinions offered is extremely difficult to formulate. In this matter the book is adequate to its intention: for to very few men of our day has it been given, as to William James, to point the way and turn the light in so many diverse directions. If the book reveals no unanimity of opinion it at least exemplifies the adequacy of James's pluralistic insight, and the power of his splendid sympathy; a sympathy and an insight which have rendered the opponent always more than his just due, and have made it possible that William James should lead even over routes unpleasant to his feet and uncongenial to his temper.

That the book shall reflect and express the trend of recent discussion is, of course, natural. The very titles of the psychological essays look toward it. Of the philosophical essays, those whose content is mainly historical glance at it; the others continue it directly. So Dr. Wendell Bush adds an argument against idealism by discussing the scholastico-Cartesian notion of the soul as a factor in the genesis of idealism; Dr. Harold Brown indicates the pragmatic character of method in modern mathematics and logistics and what philosophy might learn therefrom; while the other essays deal with matters of moral or practical interest,—Prof. A. O. Lovejoy contributing a paper on Kant's intellectual ancestry among British Platonists; Prof. Felix Adler, "A Critique of Kant's Ethics," reprinted "for the first time"; Prof. Lord, the thesis, "that the fundamental error in the study of the problem of morals is abuse of the abstractness of the method necessarily employed," and Prof. Tawney an Outline of a Classification of Values. But the majority of the essays and the more important ones are consistently "epistemological". In these the issues between idealisms, realisms and pragmatisms are redrawn and their differences restated. It is difficult to say which has the preponderating vote

in this book. Dr. Montague argues brilliantly for the thesis that consciousness is a form of energy and by implication for materialism. Consciousness, he believes, is like potential energy, in that it is a stress or force having the qualities of invisibility and privacy, unity or indivisibility, a teleological nature, a capacity for redirection. "What I, from within, would call my sensations are neither more nor less than what you, from without, would describe as the forms of potential energy to which the kinetic energies of neural stimuli would necessarily give rise in passing through my brain." Prof. Strong, propounding a theory of the mechanism of cognition, which theory he calls "substitutionalism," distinguishes "subject," "content" and "object," and defines "content" as a substitution for 'object,' the independent reality of which he asserts. Mr. Pitkin, discussing the theory of knowledge under the heading of "World Pictures," decides that "reals get into consciousness, and the reals getting in are world pictures representing part of the nature of Reality," but that reality is not constituted by being known. On the contrary, objects, according to Mr. Pitkin, "have made themselves known," although 'predispositions,' 'purposes,' and 'associations' interpret the instreaming characters, making them mean aspects of particular 'reals'. Prof. Fullerton, in "The New Realism," argues for "a realism which accepts an external, physical world distinct from any one's ideas, the realism which is in sympathy with the thought of the mass of mankind, the realism which has always been tacitly accepted . . . by science ever since there was such a thing as science" (p. 4). His plea is based on the following grounds:—

(1) That "he who declares all phenomena to be mental repudiates the actual knowledge of the world which the learned and the unlearned seem to have" (p. 11).

(2) That there is a physical world order which is "our ultimate standard of reference," "an order of experience, but not to be confounded with what is subjective" (p. 18).

(3) That "sensations referable to no body cannot be believed as real" (p. 18).

(4) That idealism is logically solipsistic (p. 19 *seq.*).

(5) That the motives which cause idealism, namely, "getting sensations by evoking the aid of the body, then denying that there is a body," . . . using the word "sensation to mark a distinction, then repudiating the foundation on which the distinction must be based,"—these motives are not self-consistent.

Prof. Fullerton, therefore, concludes first, for an external world "revealed in *experience*" (p. 35); secondly, for a world of which the experiences of two different minds are not identical and "even may be very widely different from them" (p. 36); a world the knowledge of which "grows and changes" (p. 38); a world in which there is a distinction between "the existence of things and our perception of them".

Prof. Fullerton's treatment of the relation between mind and object is orthodoxly "epistemological". Its result is a rather sophisticated realism which arises from considering the relations of process to content or object to thought. Prof. Woodbridge, however, in the article on "Perception and Epistemology," argues for a radical empiricism or 'naïve realism' by decrying the function and value of epistemology. According to Prof. Woodbridge "the actual service (epistemological) scrutiny performs . . . is not logical but moral and spiritual. It does not modify knowledge, it modifies character. It does not give us new and increased information about our world whereby that world may be more effectively controlled. It gives us rather considerations the contemplation of which is more or less satisfying to the spirit" (p. 156 *seq.*). This conclusion is reached through the observation that (1) objects "considered whether as objects or as perceptions are handled in an identical manner and yield identical results" (p. 143 *seq.*); (2) that "bodies of knowledge are not mere possibilities which we may some day realise, but they are actual bodies of knowledge already existing in various stages of progress" (p. 147); the important thing about them is their "experimental character and the fact that they are accepted by the majority of people at their face value, as measurably accomplishing the thing they set out to do" (p. 147); (3) that the perceived world and the process of perception are, even on a "representative" theory of knowledge, homogeneous and continuous, and the relations between them are empirically discoverable and verifiable (p. 163), are "rather . . . a problem of reorganisation and rearrangement, of new relations in one continuous world, not the problem of the reduplication of a world for ever excluded from the place where it is known" (p. 163); (4) that a direct examination of differences in perception itself—*e.g.*, colour-blindness—answers questions not about the existence or identity of the object perceived, but about the mechanism of perception: "what we seek to discover is not whether the colour-blind see reality as it is, but why they make the colour-discriminations they do" (p. 164 *seq.*). From these observations the general conclusion is drawn, in the words of Jevons: "we cannot suppose, and there is no reason to suppose, that by the constitution of the mind we are obliged to think of things differently from what they are" (p. 166).

On the other hand, Prof. Miller, in a subtle but rather obscurely-stated paper, "Naïve Realism: What is it?" concludes, as the outcome of an epistemological examination of perception and the process of perception, for an idealism like J. S. Mill's. The task of naïve realism, according to Dr. Miller, is to reduce the multi-dimensional physical world to the character of the monodimensional stream of consciousness; to identify the static and structural with the functional and dramatic. This achievement, contends Dr. Miller, is logically impossible. "A continuous polished brown surface (of a desk) is *not* a fibrous or granulated surface. A mar-

shalling of what we scientifically mean by molecules is not what we familiarly mean by desk" (p. 257). For Dr. Miller consciousness is the coincidence of appearance and reality (p. 255); it has no turns and no corners while the physical world has. Therefore naïve realism is inadequate. It only begins to explain reality, it does not account for the *unperceived* aspects of objects. And since "perception is the possession of certain aspects *plus* the preparedness for others" (p. 261), "objectivity" must be taken to consist in "the potentiality of further spatial aspects". But as these two phases are logically incompatible, it follows that "the nature of objectivity excludes the notion that they coexist as 'natural realism' turned into metaphysics would require".

Prof. Dewey, in the mediating fashion James says is the peculiar manner of pragmatism, reveals affinities with all the foregoing authors, but coincides in his opinions with none. With Dr. Miller he agrees that perception is at one and the same time a possession and a preparation; with Prof. Strong, that there are independent objects other than the content of knowledge; with Prof. Woodbridge, that epistemology, which Dewey denominates "intellectual lock-jaw," reveals nothing of the nature of knowledge and does not define its content; with Prof. Montague, that consciousness has an energetic nature; with Prof. Fullerton, that knowledge grows in the world and that there is a distinction "between the existence of things and the perception of them". On the other hand, he differs from them regarding the influence of knowledge on reality, its definite relation to its object, and its function in nature. His essay, "Does Reality Possess Practical Character," insists on the one hand that the object makes a difference to knowledge; on the other, that knowledge makes a difference to its object. Awareness is not a miraculous ineffectual operation of living beings; it is a conspiracy of events in a continuously altering universe. That change, alteration, is the prime character of reality Prof. Dewey repeatedly insists. His essay begins and ends with the distinction, drawn sharply, between dynamic and static visions of the universe, between conceiving it *sub specie æternitatis* or *sub specie generationis*. His entire treatment of the 'problem' of knowledge is based, in this essay, upon the principle that reality is in continuous flux, that it is a turmoil of events, making differences in, for, by and to each other. Of these events, he asserts, knowledge is one; to label this vision of its nature and function "merely personal," "subjective," is to manifest merely subjection to an "ancestral prejudice" in favour of a conception of reality as static. Of the other objections urged against this functional nature of knowing, one is the misconception,—that because it is held that knowledge makes a difference to reality, it is therefore held that knowledge makes "any old difference"; whereas the theory requires that knowledge shall make a particular difference, namely the *right* difference. From this point of view, the problem of the knowledge of past time dis-

appears: "what we know as past may be something which has *irretrievably* undergone just the difference which knowledge makes" (p. 58). Another set of objections commit the fallacy of assuming "that to hold that knowledge makes a difference in existences is equivalent to holding that it makes a difference in the object to be known, thus defeating its own purpose; witless that the reality which is the appropriate object of knowledge in a given case may be precisely a reality in which knowing has succeeded in making the needed difference".

Having cleared away the underbrush of objection and misunderstanding, Prof. Dewey proceeds to expound the harmony of pragmatism with common-sense and with biology, and finally, in a cursory examination of awareness itself, the incidence of his pragmatic theory with the facts of awareness.

Common-sense, Prof. Dewey shows, regards intelligence as supremely practical—it is what "the Yankee calls gumption—acknowledgment of things in their belongings and uses" (p. 59). The one "objective test of the presence or absence of intelligence is influence upon behavior. No capacity to make adjustments means no intelligence; conduct evincing management of complex and novel conditions means a high degree of reason" (p. 61).

Again it is an accepted tenet in common-sense that "all knowledge issues in some action which changes things to some extent; . . . that knowing *after the event* makes a difference. . . . But there is a further question of fact: just how is the 'consequent' action related to the 'precedent' knowledge?" When is "after the event"? "What degree of continuity exists?" (p. 61 *seq.*). If finished knowledge issues into action by the merest chance, if the subsequent action just happens, its adequacy to the situation in which it occurs is inexplicable. Moralists and experimentalists together with the run of mankind proceed in a manner which forces us to hold "that the realities which we *knew*, which we are sure of, are precisely those realities that have taken shape in and through the procedure of knowing".

Finally, if there be a great gulf between knowing and doing, how can moral and scientific knowledge both hold of one and the same world? Dr. Dewey's answer, that scientific knowing also is a *doing*, that "scientific judgments are to be assimilated to moral," is, he asserts, "closer to common-sense than the theory that validity is to be denied of moral judgments because they do not square with a preconceived theory of the nature of the world to which scientific judgments must refer. And all moral judgments are about changes to be made" (p. 64).

Biologically, "the brain, the last physical organ of thought, is a part of the same practical machinery for bringing about adaptation of the environment to the life-requirements of the organism, to which belong legs and hand and eye" (p. 64). The brain's deliberating function does not "remove it from the category of organic devices



of behaviour" (p. 65); its business is still and irrevocably practical. Now "the behaviour of the organism affects the content of awareness" (p. 65), "all 'secondary' qualities involve inextricably the interaction of organism and environment" (p. 66). But while idealism cannot be hence deduced, the interpretation of reality as practical follows easily and naturally . . . "the fact that the changes of the organism enter pervasively into the subject-matter of awareness is no restriction or perversion of knowledge, but part of the fulfilment of its end" (p. 67). In this case the question is only are the *proper* reactions made? and what is important is the *way* in which "organic behaviour influences and modifies" its subject-matter. The manner of the influence must not, however, make a difference, *qua* knowledge, in its own object, for knowing fails thereby; "but the proper object of knowledge is none the less a prior existence changed in a certain way" (p. 70). The 'way' is itself determined with reference to the well-being of the organism. Biologically, the "appropriate subject-matter of awareness is not 'reality at large,' but that relationship of organism and environment in which functioning is most amply and effectively attained: or by which, in case of obstruction and consequent needed experimentation, its later eventual free course is most facilitated" (p. 70 *seq.*). Knowledge, then, studied in the light of biology, is functional.

No less is its functional character revealed when considered in itself. Awareness is "an event with certain specifiable conditions" (p. 72). It means "*attention*, and attention means a crisis of some sort in an existent situation, . . . something the matter, something out of gear, or in some way menaced, insecure, problematical and strained" (p. 73). But this crisis is "nothing merely emotional" or subjective. It is "in the facts of the situation as transitive facts; the emotional or subjective disturbance is just a part of the larger disturbance, . . . as biologic as it is personal and as cosmic as it is biologic". It is the "total order of things expressed in one way". Awareness, then, "means things entering, *via* the particular thing known as organism, into a peculiar condition of differential—or additive change" (p. 74). But this change, we are again warned, is not a change in the 'proper' object of knowing: "For knowing to make a difference in its own final term is gross self-stultification; it is none the less so when the aim of knowing is precisely to guide things straight up to this term" (p. 77 *seq.*). And the guiding is a genuine change in the prior existence which change implies; in "existences which have characters and behaviors of their own which must be accepted, consulted, humored, manipulated or made light of, in all kinds of differing ways in the different contexts of different problems" (p. 78).

So is stated and defended, on the grounds of common-sense, biology and psychology, an extremely subtle definition of the nature of knowing which Dr. Dewey elects to denote as 'pragmatism'. It is opposed to idealism in that it insists that objects are not

constituted *merely* by being known, that they have a nature and an existence independent of all knowledge of them, and that one of such objects is knowledge itself. It is opposed to current realism in that it insists that knowledge, while it does not create its objects, makes a causal difference in and to them, just as, conversely, they do to it. At first blush this pragmatism seems not unlike Kantianism ; but it differs from that because for it knowing is alteration, change essentially, within and without, while for Kant the inner character of knowledge, the forms of the understanding, space, time and the categories, remain rigid and unalterable during the process of knowing. Another point of difference is that this pragmatism claims to contain nothing whatever transcendental or noumenal, and yet another is that it abolishes utterly the essential distinction made by Kant between theoretical and practical reason. With Kant, it asserts the priority of practice, but asserts also that there is nothing else. It must be argued against those who claim that this philosophy is to be assimilated to some historical view,—idealism or realism, or the Kantian half-way house,—that a candid examination of the facts does not show it so assimilable. It is really a *new* philosophy.

But whether this philosophy is new or old, it is not at all clear that Prof. Dewey has succeeded in defending it against objections. It is doubtful whether the reply to the charge of subjectivism is adequate. The reply indicates that knowledge, though not *alone* constitutive of its object, is still constitutive. But to what degree is it constitutive and what does the object itself contribute to its identity? How is knowledge to be distinguished from its object? These questions would seem to be unanswerable, for in a continually changing medium, in which knowledge is a potent factor of change, the prior existences which knowledge implies can never be known ; and though knowledge makes no difference to the object *to be* known, to its own final term, there can, in a continuously changing world, be no final term. The analogy which Prof. Dewey draws (p. 66) between the fact that knowledge involves a relation between organism and environment and the fact that water involves a relation between hydrogen and oxygen is an overt *petitio*, for hydrogen and oxygen as relating to water are distinctly *prior* existences independent of water, and final terms alike with water. They are knowable in themselves without any aqueous modification whatever. But the conditions of knowledge do not bear the same relation to knowledge ; they are prior but not independent ; final they certainly are not. Both the prior existences and the final terms of knowledge are as transcendent as Kant's things-in-themselves ever were. Consistency therefore would demand the exclusion of 'prior events' and 'final terms' except as mere limitative concepts, like Dr. Schiller's *ἰδέα*. Yet it may be suggested that Prof. Dewey may well laugh at the charge of inconsistency. A description of a world of change, conflict, turmoil and

reconstruction, the very essence of whose being is inconsistency, he may reply, must contain this very inconsistency. And to this reply there is no rejoinder.

At the same time it is clear that the defence of such a view, the discussion about it, would be impossible without certain fixed standards of reference, *known* but unchanged by manipulation in knowledge. The term *knowledge* is itself such a standard; so are *prior*, *object*, *end*. Whatever their origin, whether created wholly or in part by the act of knowledge or only apprehended thereby, once they appear in discourse they have a character unshaken by use in it, an inexorable immutability without which there could be no discourse whatever. Their relations may change with their utilities, but they themselves remain unchanged, whatever their use or relations. And in the validity of this thesis lies the crux of the whole issue. How are terms and relations connected? Are relations internal or external? Prof. Dewey implies by his treatment of knowledge that relations are internal, but it is respectfully suggested that a less inconsistent and equally pragmatic pragmatism is possible under the conception that relations are *external*.

HORACE M. KALLEN.

---

*The Problem of Logic*. By W. R. BOYCE GIBSON, M.A. (Oxon).  
With the co-operation of AUGUSTA KLEIN. Pp. xii, 500.  
London: Adam and Charles Black, 1908.

WE congratulate Mr. Boyce Gibson on the production of a sound, clear, and judicious work, which cannot fail to be of great service to students. The days are past when—so far as text-books written in English were concerned—the student of Logic was obliged to pass directly from such a book as Jevons's *Elementary Lessons* to the larger works of Bradley and Bosanquet. The treatise before us will take a high place among those which are calculated to make the transition from the elementary to the philosophical view of the subject natural and easy.

The book is, as the author himself tells us in the Preface, "in a sense the work of three". Not only has it grown up and taken shape "under the chastening influences of College teaching," but the original drafts were thoroughly revised in conjunction with the collaborator whose name appears on the title-page, and from an early stage in the work the author has enjoyed the sympathy, assistance and criticism of Prof. G. F. Stout: "on such fundamental heads as the Laws of Thought, the interrelation of Categorical, Disjunctive and Hypothetical Judgments, and the essential meaning of the Disjunctive and Hypothetical Judgments, the substance of Prof. Stout's contentions was adopted" (p. vii). The present volume is the first of two, of which the second will deal with the Logical Problem in its more philosophical aspect. The general

tendency which is likely to be realised in the complete work is suggested by the following statement: "The Idealism in which the author's own conviction culminates seems to him to call imperatively for a frank and full co-operation between the idealism of the Hegelian School on the one hand, and the Psychologism of the Pragmatic and Genetic movements on the other. In attempting this reconciliation, so far as it is relevant to the requirements of a logical treatise, the author ventures to hope that he may be found working in the service of that liberating movement in Philosophy which, in his own mind, is centrally associated with the work and personality of Prof. Eucken" (p. ix).

The author conceives the problem of Logic to be the nature and conditions of what is called the search for Truth, *i.e.* the struggle to realise the complete unity of Thought. It is the nature of Thought to aim at such unity, which however is not a *datum* but a problem. The process is carried on subject to a control by relevant fact. Reality must be conceived as having a nature sufficiently stable to control our tentative thought about it. In addition to the reference to Reality, so understood, Thought implies a reference to Purpose: "the purpose of the inquirer, be it that of the physicist, biologist, artist, or mystic, determines the range of fact within which the student recognises an objective control; . . . the investigator is thus self-controlled by his own purpose and outwardly controlled by the facts so far as they are relevant to that purpose". This conception of *relevance to purpose*—the application of which is the central feature of the present work—seems to me to be thoroughly sound, and prepares the way for a vital and concrete treatment of the traditional topics of logical doctrine. The present volume, as we have noted, deals with "pre-philosophical" Logic, so that a limited conception of Truth (which is of course equivalent to a limited conception of *experience*) is sufficient: *i.e.* "(1) The world as common-sense understands it (or some conventionally restricted fragment of it); (2) Nature, understood as the subject-matter of science" (p. 4). The parenthetical qualification under the first head is necessary because common-sense never disregards the reference to *personal* experience as such, and to Self-knowledge: "Only when we have eliminated as irrelevant the relation of truth to personal experience can we fairly describe Science as organised Common Sense" (p. 5). The further and philosophical development of Logic breaks down the externality between fact and idea, and involves a conception of "fact" larger than is possible to science or appropriate to its restricted point of view. It refers ultimately to *experience* in the complete meaning of the term,—experience as understood, for example, in Hegel's *Phenomenologie des Geistes*, in contrast with experience as understood under "positivist" limitations.

The conception of Relevance to Purpose enables us to distinguish in the pre-philosophical Logic two connected stages. The first is "formal," in the sense of "conventional," implying a reference

"not to a permanent order like Nature as conceived by Science, but only to such conventionally restricted aspects of it as answer to the requirements of some particular purpose". This "formal" part of the subject embraces the following subjects: the Logical Use of Words; Definition, Division, and Classification; Connotation and Denotation; Concrete and Abstract Terms; the Laws of Thought; Propositions and Judgments, and their Import and Analysis—all of which topics are treated as fully and critically as possible, subject to the further development of doctrine in the sequel; also the ordinary topics of "Formal Logic," *i.e.* Opposition, Education, and Syllogism, followed by a chapter on Fallacies, and one on "Truth-inference, formal and real," leading to the "second, real, or scientific stage," where the casual, disconnected grasp on reality, which the conventional or formal restrictions of the first stage involve, is abandoned: "Thought ceases to play with Reality in the interests of discussion or other requirements of practical intercourse; armed with the idea of natural law, it now disposes itself to face the full force of that great realm of fact which has no limit but that of the applicability of the idea itself" (p. 5). There can be no doubt as to the importance of the distinction marked by the terms "formal" and "real"; but there is much doubt as to the satisfactoriness of the terms themselves.

What is the position, in this programme, of "Formal Logic" as currently understood? The author distinguishes a "formal" treatment of the subject (in the sense noted above) from a "Formal" treatment, and uses a capital letter for the second adjective. "We find," he says (p. 7), "that at a certain stage in the development of our subject it becomes necessary to abstract entirely from the reference of thought to reality as we have defined it, and to concentrate our whole attention on the logical conditions of valid thinking" ("validity" being defined by reference to the Laws of Formal Identity and Non-contradiction, as on p. 187). Why is it "necessary"—except for the reason that a group of traditional doctrines, which through a series of historical accidents have come down to us under the name of Logic, and are miscalled "Aristotelian," have been exaggerated into a system by many influential writers?<sup>1</sup> Mr. Boyce Gibson makes claims for "Formal Logic" which it would be difficult to substantiate. He raises the question whether Formal Logic, in abstracting from all reference to Truth and Reality, leaves nothing for itself, as Logic, but "some abstract department of non-being". This I should say is exactly what in strict system must happen. When Logic is understood as the Logic of Formal Consistency merely, the whole doctrine reduces itself to the statements  $A$  is  $A$ ,  $A$  is not non- $A$ ; even "propositions" become extra-

<sup>1</sup> Even a glance at Aristotle's methods of arriving at the valid moods of the three figures (*An. Prior*, I. iv., v., vi.) will show that the supposed science of Formal Logic is utterly alien to his whole view of the subject.

logical.<sup>1</sup> Of course the principle never is thoroughly or consistently carried out. It is true that, as Hegel said, "the Understanding has its rights," and can be treated in abstraction from the life of Reason, as in fact Mr. Boyce Gibson has treated it. But a purely Formal Logic can give no adequate account even of the Understanding. The author says that Formal Logic gives the student a preliminary example of scientific method: "the Rules of the Syllogism, for instance, form a 'science' in miniature" (p. 305).<sup>2</sup> In a sense, this is true. But on the whole it is difficult to gainsay Adamson's verdict: "The ordinary school or Formal logic can lay no claim to scientific completeness; its principles are imperfect, dubious, and most variously conceived, it possesses no method by which development from these principles is possible, it has no criterion by which to test the adequacy of its abstract forms as representatives of the laws of concrete thinking".

I do not for a moment deny that Formal Logic can be profitably treated and studied. I believe it is best treated by connecting the traditional doctrines with their Aristotelian fountain-head,—not only because of the predominant interest in the reference of logical principles to reality, which characterises Aristotle's method, but in order to make various doctrines and phrases intelligible, which in the ordinary text-book are simply "shot from a pistol," as it were. And as to the value of the study, both as mental discipline and as introduction to some important philosophical problems, there is no dispute.

The main question which I feel inclined to raise regarding Mr. Boyce Gibson's treatment is this: of the two aspects of Thought which he indicates, namely reference to purpose and reference to "objective control," how far does he do justice to the latter? He notes its importance frequently; but while the conception of Relevance of Thought to purpose is constantly and fruitfully applied, the Realistic implications—as emphasised for example by Mr. Bradley<sup>3</sup>—on the whole are kept in the background. Thus, what Mr. Gibson says about *Essence* (pp. 27, 28) naturally leads to such a conclusion as the following, which however is not drawn by the author. "To say that a thing has a nature or essence at all, simply means that it is capable of definite modes of behaviour in response to what is done to it. Thus, let us consider some substance which is being used by man for his own purposes. However plastic it is to his designs, whatever transformations he makes it undergo, there remains something which he cannot alter, and which seems indeed

<sup>1</sup> Cf. Adamson, article "Logic," § 33; *Enc. Brit.*, vol. xiv., p. 800.

<sup>2</sup> On the other hand, in a brief but excellent account of Abstraction he shows that the purely Formal Logic works with a conception of Identity which is altogether untrue to the actual facts of thinking (p. 21). The attempt to use Identity without difference is well criticised on pp. 96, 97.

<sup>3</sup> Cf. especially his exposition of the Hypothetical Judgment as referring to a Law in the Real, governing the particulars.

to dictate the limits within which his transforming power over the substance shall extend. This is the truth which underlies the ancient doctrine of fixity of species. There is a 'nature' of the thing, not separable from the changeable qualities . . . but *revealed* in the changeable qualities as a law controlling their changes in action. Hence to understand things we must make an extensive study of their behaviour, and if possible *make* them act,—experiment with them."<sup>1</sup>

On the other hand, the importance of the conception of Relevance to Purpose is well shown in the treatment of Definition, Division, and Classification; *e.g.* definitions are criticised by first asking what is the purpose of the definition; and "relevance to purpose" alone gives meaning to *exhaustive* division (p. 46) and to dichotomy (pp. 50, 51). The distinction of "formal" and "real" in reference to purpose, though as I think unhappily *named*, is most helpful. The author has an interesting discussion of the definability of *summa genera*, the divisibility of *infimæ species*, and the definability of proper names. In connexion with the first-named point, he examines Mr. McTaggart's argument regarding the affirmation of "Pure Being".<sup>2</sup> In this connexion I am not sure that he does not forget the principle underlying his own doctrine of abstraction: "'Colour' [which by analogy we may name 'Pure Colour'] does not mean that which is neither violet, nor red, nor blue, nor any other colour; it means 'colour of some kind,' and when its meaning is pressed a little further, it is seen to signify violet, or red, or blue, or some other colour" (p. 21). Hence I do not see how Mr. Gibson can object,—when Mr. McTaggart affirms Pure Being, as the first step in the Dialectic, in the form "Something is,"—that he is affirming "Being of some kind" and not "Pure Being" (p. 76).<sup>3</sup>

In the discussion of the Laws of Contradiction and Excluded Middle, the distinction between Formal and Material Logic appears as a distinction between the aspect of statement-import and the aspect of truth-import in a proposition. The Law of Contradiction relates to the former only; it refers essentially to the procedure of the *thinker*, and should be expressed in the form that *we cannot* entertain or think of contradictory propositions "together". The author holds that when the Law is put in the form "if SP is *true*, the contradictory of SP is *false*," it then becomes a postulate of the *intelligibility of reality* as such. In estimating the value of this distinction, we must ask what is meant by the word

<sup>1</sup> Mellone, *Introductory Text-Book of Logic*, 3rd ed., p. 156.

<sup>2</sup> McTaggart, *Studies in the Hegelian Dialectic*, p. 21 (§ 18).

<sup>3</sup> We may note in passing that on p. 73 and elsewhere the author gives symbolic statements of his results. I am reminded of Prof. Marshall's statement that the student of Economics should not spend time studying translations of economic laws into mathematical formulæ, unless they have been made by himself. Hence in the well-known *Principles of Economics* all such "translations" are relegated to an Appendix.



"together"? In the well-known passage in *Metaphysics*, IV. iii., Aristotle explains it as signifying "at the same time, in the same object, in the same respect, *and with any other qualifications* which may be found necessary". Now Prof. Stout's criticism, quoted by Mr. Gibson (pp. 100, 101), shows that the reference to time is not required. Contradictory propositions cannot be true "at different times"; for what is true does not become false by mere lapse of time. Setting aside the time-reference, we have the interpretation of "together," in the statement of the Law of Contradiction, as meaning at least "in the same subject, and in the same respect or reference". This evidently implies *both* the aspects which Mr. Gibson indicated as belonging to the nature of Thought: (a) relevance to a controlling reality, and (b) relevance to the purpose of a thinker; accordingly we may say (a) reality cannot possess contradictory predicates in the same point without ceasing to be intelligible, and (b) the same thought-interest cannot entertain contradictory propositions as true of its object, without ceasing to be a thought-interest. What the author does is strictly to limit the meaning of the Law of Contradiction to (b),—why, I do not know, unless it is to give an appearance of foundation for "Formal Logic". As regards Excluded Middle, the author says that "the attempt to interpolate a reference to the *thinker* would destroy the whole self-evidence of the principle"; we are not obliged to *think* as true either SP or its contradictory, since one of them may be a mere unverified hypothesis. This is true; but it does not alter the fact that if a predicate has any relevance to a thought-interest, then the further we pursue the investigation the nearer we come to a point where we *must* either affirm or deny that predicate of the object: e.g. the supposition that Mars is inhabited.

The foregoing has a bearing on the question of Immediate Inference, which is defined as "the inference from the acceptance or rejection of a proposition to the acceptance or rejection of a further proposition on the sole basis of the laws of Identity and Non-contradiction". From this it follows that Obversion is Mediate Inference. The result is reached by denying the self-evidence of the proposition "either S is a P or else it is a non-P" (because P and non-P together exhaust only a limited universe) and by making the obverse of "all S is P" the conclusion of a Disjunctive inference. I believe that the number and extent of the difficulties which can be raised about the traditional forms of Immediate Inference depend entirely on the way in which you choose to define the process at the outset.<sup>1</sup> It must be admitted that Mr. Boyce Gibson's difficulties are correctly deduced from his definition, and hence his exhaustive discussion of them is valuable.

In the chapters on the Forms of Judgments (pp. 111 ff.) the reference to "objective control," to which we have referred, appears to be kept unduly in the background; but as far as it goes, the treat-

<sup>1</sup> Cf. *Introductory Text-Book of Logic*, 3rd ed., pp. 81, 88, 110, 158.

ment is sound and suggestive. The logically ultimate Subject is taken to be the limited "universe of discourse" to which the thought-interest (which inspires the Judgment) has reference (p. 118). The author says that Mr. Bosanquet's interpretation of the Subject of the Judgment,—which presses "subject of discourse" back upon "reality as a whole" or "the real world as a whole," and takes the real world as a systematic whole to be the ultimate or absolute Subject,—involves "a clear disregard of reference to purpose". This appears to be more true of Mr. Bradley's interpretation than of Mr. Bosanquet's. The latter, while agreeing with Mr. Bradley that the *ultimate* Subject lies beyond the S and P of the ordinary analysis, does not dispense with or interfere with the ordinary analysis, which must be used whenever the Judgment forms part of an inference.

The only section which I find difficult to understand is that which deals with the Aristotelian *dictum* and criticises the idea of a general law being "applied" to a particular case. The arguments appear to rest on restricted definitions of terms which might be otherwise defined—as when the author says: "If, dissatisfied with the *dictum* we seek for a conception that can inspire the systematic application of Law to Fact, we must turn, not to any mere principle of Deductive Inference [by which is meant apparently 'Formal' Deduction] but to that larger process of Deduction of which the aim may be correctly defined as 'the valid application of systematised knowledge to unsystematised fact'". I believe it can be shown that the principle of this "larger process of Deduction" is essentially of the nature of the Aristotelian syllogism of the First Figure, and capable of being expressed in the general form given by Aristotle for the supreme Canon of Inference. This is true of Inductive Inference itself. Even Mill—that champion of pure Induction—had more than a glimpse of this when he spoke of a certain principle as "the *ultimate major premiss* of all Induction".<sup>1</sup>

These detailed comments have already been unduly extended, but I can only plead as an excuse that the book teems with points of fresh interest. I have little space in which to pursue further points. The exposition of induction with which the volume concludes is excellent. We note the author's remark that the discussion of the principles of Mathematics in their logical bearing is to be taken up in the second volume. This is a subject in which it is more easy for a philosopher to go wrong than in any other that he could take. But the study of Mr. Gibson's first volume leads one to form high expectations of his second, which we hope will appear at no distant date.

S. H. MELLONE.

<sup>1</sup> The reader may be reminded of Ueberweg's sympathetic yet accurate exposition of the Aristotelian view of Deduction in the relative portion of his *Logic*. I have tried to suggest a view of the deeper significance of the Aristotelian principles, *Introductory Text-Book of Logic*, 3rd ed., ch. vii., § 7, and note B, ch. viii., § 3 (cf. p. 384).

1. *Die Kindersprache, eine psychologische und sprachtheoretische Untersuchung.* Von CLARA und WILLIAM STERN. Leipzig, 1907. Pp. xii, 394.
2. *Erinnerung, Aussage und Lüge in der ersten Kindheit.* Von CLARA und WILLIAM STERN. Leipzig, 1909. Pp. x, 160.

ALL serious students of children and their ways will welcome the projected series of monographs, of which the two cited above have already been issued. Child-Study, though fortunate in the breadth of interest to which it appeals, especially in America and Germany, is not always fortunate in the work issued in its name. For, provided the work is sensational enough in character, and revolutionary enough in aim, it does not fail to secure an audience and an influence altogether disproportionate to its merits. This excites the wrath of experts, to wit, the animadversions in Prof. James's *Talks to Teachers*; but I regret to say that their wrath is of little avail in checking the outflow of unverified guesses and startling conclusions which still form much of the pabulum of Societies for Child-Study. Such work cannot be put out of court by merely negative criticism; it can only be displaced and superseded by such work as is now under review.

The authors have three young children, and, for a series of years, they have watched their development and recorded it at the time of observation—a very necessary step.

They give us facts enough to render us somewhat independent of their own conclusions, with which, however, we need rarely quarrel, for they have avoided the root error of many earlier writers, who have transferred a complete analysis of the adult mind by direct projection into the mind of the child. As the authors say of one of these writers: "Es wird manchmal zu viel in das Kind hineingelegt". They rightly protest against a psychology which treats the child as an Homunkulus—the view which was once expressed to me by a teacher in the words: "Children are the same as we are, only smaller". Truly enough we wish to train them to become complete and efficient men and women, as far as their natural endowments will permit. But it can only lead to confusion psychologically if we base the psychological science of childhood on the conclusions valid in adult life. The authors indeed seem to go somewhat further; if I understand them rightly, they appear to me to incline to the view that any kind of intentional educative process will disturb the natural psychological development of the child and render our conclusions, however valuable they may be for the purposes of experimental pedagogy, of little value as pure psychology. I venture gravely to doubt this. The action and reaction of the individual and his environment continuously goes on whilst life exists, and goes on very rapidly in childhood; we cannot escape from the educative process: and it seems to me well, if our conclusions are to be valid on a large scale, to control our environment in definite ways, that is, to

adopt an experimental rather than an observational method. But I guard myself against denying very high value to the method which merely stands aside and watches. They also serve who only stand and wait, but they must wait watchfully and wisely.

The writers do not confine themselves to the evidence and conclusions drawn from their own children. As is usual in German work, full reference is made to the work of other German writers; and, as is not so usual, American work receives full recognition; nor is English work—what there is of it—neglected; the references to the work of Frenchmen are somewhat less numerous, I incline to think, than would have been justified by the facts. And the bibliographies are indeed most valuable to the student of children, especially because, in the first place, scattered articles *are* included, and in the second place, *only* those books and articles dealing definitely with the subjects of the monographs are included.

The authors' monograph on Kindersprache is divided into three parts of approximately equal length; firstly, we have a chronological account of the speech development of two of their own children; secondly, a section on the psychology of children's speech, and thirdly, a section on the special characteristics (Linguistik) of Kindersprache. The authors state, and I heartily agree, that the clearest expression of the mental development of a child's early years is found in his speech, and that, in the most recent child psychology, speech development occupies the largest place. I do not feel very hopeful as to the practical value of a child psychology developed merely on the estimation of minute sensational differences, though even this is not entirely without value; but about the practical value of a really sound account of the natural linguistic development of children there can be no doubt, especially for teachers. And why should not even philologists, as the authors say, find our growing speech—in living process before their eyes—of more value for their purposes than the petrified remains of dead languages? Of course one can work both ways, from the child's language to primitive tongues and *vice versa*. All forms of speech occur, as I take it, and occur quite early—the outcome of emotion, the expression of thought, the result of parrot-like imitation and the outcome of the conative impulse to utter articulate sounds. It remains to be seen just how and how much these several lines of development contribute to the growing speech of the child.

Much, very much of the chronological work is arranged on a grammatical classification. If our teachers could only know how grammatical distinctions arise and grow, they would cease to regard and to teach grammar as a dead and formal thing. In the second part of the book there is a chapter of special value to teachers on the order of the development of the Parts of Speech and the order of the development of the distinctions within the parts of speech themselves (Kapitel xv., Die einzelnen Wortklassen). The contradictions between different authors, though not vital, raise the diffi-

culty which one always feels when a few children only in particular family groups form the sole data for our conclusions—we feel that we are not escaping individual variations. One interesting point which was quite new to me occurs in the treatment of the verb, to wit, that the child uses subjunctive forms early, but with indicative meanings. As the writers say: "The early interest of children is throughout realistic, possibility is reality, to appear and to be are not divided"—a standpoint from which I have myself ventured to criticise and limit the Imagination theory of early Play.

The third section of the monograph deals with the special characteristics of children's speech—their mistakes, their stammerings, their imitative sounds, their inventiveness, their syntax, their word-building, their etymology. I must content myself with one extract on invention, which I commend to Froebelian pedagogues. "Die wahre Spontaneität der kindlichen Wortbildung äußert sich nicht im Schaffen aus dem Nichts, sondern im frein Schalten und Walten mit dem gegebenen Material."

Let me now turn to the second monograph, which deals with "Erinnerung, Aussage und Lüge" in early childhood. A slight departure is made from a purely observational method and a coloured picture is used with valuable results as a test of "Anschauung, der Aussage, der Intelligenz und der Sprache". But why, may I say *en passant*, contrast intelligence with observation and perceptual judgment; is not intelligence manifested in both the latter functions? And may I suggest that the order in which the words 'Erinnerung' and 'Aussage' appear in the title may be misleading psychologically to English readers? We are rapidly ceasing to base perception on imaged revivals, and, as the author himself asserts, Recognition (I would say rather Cognition) is the propædæutic of memory, and even this is preceded by a feeling of familiarity which is below and beneath cognition. Memory, except in an inferred and physiological sense, does not exist in these early stages, the perceptual judgment precedes it—of course, I do not assert that the judgment is always verbally expressed, though it may be expressed while there is no memory, properly so called, of what is named. It is very pleasing to find a highly competent observer and psychologist definitely asserting the extreme weakness of memory in early years. Mr. H. G. Wells, in *Mankind in the Making*, strongly countered the current view that memory functions most vigorously in the earliest years, but his declaration lacked the authority and basal facts which support the declaration of these authors. Statistical researches of my own show the unprofitable nature of attendance at school in early years, and I incline to think that mnemonic weakness is responsible for much, if not for all, of the lack of result from early teaching.

This book, like the other, is in three sections—a chronological account of the development of the authors' children, a general psychology of the declaration of perceptual judgments (Aussage)

and a section on the practical applications of the conclusions arrived at in the preceding sections. Teachers, yes and other persons more than tinctured with psychological knowledge, have been accustomed to explain most of the errors of perceptual judgment as due to 'schlechtes Gedächtnis'. The authors show how many other factors may be responsible and relieve memory from some of the odium thrown upon it. I should like to have seen an analysis which would put upon our old educational friend 'Apperception' the perceptual errors for which it is responsible; but, if the authors have done this, I have missed it.

'That is wrong, this thing is not  $x$ , it is  $y$ ' is the form of much so-called correction of errors in perceptual judgment. The authors tell us, truly enough, that this correction 'hat meist nur eine sehr oberflächliche Wirkung'—a reproof which I think is all too light for the pedagogical error involved in the practice. An interesting chapter on Children's Evidence closes the third section, from which I have been able only to cull a few salient points.

Perhaps I may find space for one or two further notes on the preceding and more strictly psychological sections. In perceptual judgment the child mixes what he sees with what he knows and remembers; there is no calling up of images and deliberate comparison with present sensation—the doctrine of perception beloved by the English classical school. Early perceptual judgments are complications rather than associations, as Prof. Stout has always insisted. I must, however, enter a *caveat* against the authors' interpretation of error in the child's misuse of colour names; they are disposed to regard them as wholly caused by previous associations of different colours with the same object. I suggest that they may be largely the outcome of the lack of the remembrance of sensational distinctions; probably caused by the original sensations from the colours which were confused being much more alike to the child than they are to us. Hilda, aged six years and ten months, confuses in name blue and green, white with light-blue, and green with brown. There is no need of a theory of previous association to explain confusions like these; but I do not reject the authors' theory as an explanation of some of children's errors in the colour names of things, particularly of those of older children.

The longest chapter in the book, and the one in which the authors' hearts are apparently most deeply engaged, is that which deals with experimentelle Aussageuntersuchungen. I venture to translate 'Aussage' as 'assertion based on judgments of perception'. Dr. Stern's work on 'Aussage' is well known, and in this chapter a new interest is added by a research on the effects of continual but non-purposive observation—non-purposive, that is, so far as the experiment is concerned. Hilda, Günter and Eva, whom I already begin to know and like (it would be a pleasure to teach Günter), figure throughout; it is really a chapter on the individual psychology of the authors' own children. But teachers must beware; their grades

of mental activity are much too high if presented as normal, particularly that of Günter, who is only five years old. This is due, perhaps, partly to intellectual parentage, partly to the fact that they have been previously practised in describing pictures. So the work is not *extra-scolaire* in the sense of Binet—whose corresponding work I should like to have seen referred to in this section.

It is a delightful chapter. I wish I could find space to give a full account of it, but I am afraid I must content myself with a few critical comments. Would it not have been better to present the younger work first and so pass *upwards* along the developmental track? And if the picture 'Gänsebild' had been coloured, and, like the Frühstückbild, had been put at the end of the book, it could have been cut out easily and placed side by side with all the text referring to it. This would have been much more convenient for the reader, even if *all* corrections were shown in the square brackets, which they are not. And much as I appreciate the profound knowledge of children shown by the authors, I get a little impatient of psychological explanations of difficulties undertaken on consideration of such few cases—I want to heap up many more cases before resorting at all to the explanation of difficulties; which, indeed, the results on a bigger scale often show to be apparent only.

I am strongly convinced that 'Aussage' not only forms an excellent test of the mental level of a child, but that 'Aussage' methods will finally revolutionise infant school teaching, which is still too sensational and Froebelian. As is now well known, 'Memory' is an extraordinarily potent factor in all this work and the cleverer children show the best memories, even improving in memory after an interval of as much as eight days between impression and reproduction; on the other hand, the younger and weaker child goes down, just as the overstrained *savant* of middle age does. I am more than a little doubtful about explanations of superiority which seem to depend on 'images,' and, on page 99, there is an echo of Prof. James's 'big, booming, buzzing universe,' which is *not* the world of the child. Very striking and, I think, true, normally, is the statement that, with children, accuracy of memory and spontaneity of expression go together. But all these relations must be measured by large scale methods before we feel any security. I leave this chapter with regret.

The chapter on the Self-consciousness of children (*Das Sich-Besinnen*) is interesting; and, provided that we interpret it to mean self-knowledge, seems to me sound. But, surely, the early stages of conative consciousness can hardly imply (a) the noting of a want, (b) the belief that we can gratify it, and (c) the striving to carry it out. Such a scheme, I suggest, too highly intellectualises the earlier stages of self-consciousness.

I feel, however, that my reader is in danger of supposing my disagreements with the authors are more numerous and fundamental than they are, owing, doubtless, to my misplaced emphasis.



On the contrary, I have read no sustained work on early childhood with which I am more in agreement, and I look forward with pleasure to deriving profit from the ensuing publications in this admirably projected series of monographs.

W. H. WINCH.

---

*Plato*. By Prof. A. E. TAYLOR. London: Archibald Constable & Co., Ltd., 1908.

THIS is an important little book. Plato-scholars will find their problems discussed in it with the insight and independence which Prof. Taylor always brings to his treatment of philological and philosophical subjects; while amateurs will carry away from it, especially from chapter iii., 'The Soul of Man—Psychology, Ethics, and Politics,' a good general view of the character and significance of Plato's thought.

Having said this about its value for amateurs, I shall confine myself to the book as it addresses itself—sometimes between the lines, sometimes more explicitly—to Plato-scholars.

Those who are acquainted with Prof. Taylor's MIND articles on the *Parmenides* will be prepared to find that, in this book, he dwells insistently on the Doctrine of Ideas as Methodology, and has little to say about it as 'Metaphysics'. This I look upon as a great merit in his treatment of the Doctrine. In proportion as an expositor of the Doctrine of Ideas ignores or underestimates its methodological significance is he likely to be found enlarging on its 'metaphysical import'. Prof. Taylor is not one of those who weary us with their talk about 'the metaphysical reality' of the Platonic Ideas, solemnly warning us that this reality is something entirely different from the mere 'scientific truth' of the 'Socratic εἶδος'; but, when asked to explain how the 'metaphysical reality' of the Platonic Idea differs from the 'scientific truth' of the 'Socratic εἶδος,' cannot do so—merely put us off with variously phrased reiterations of their original assertion that the truth of the εἶδος aimed at, or reached, by the 'Socratic method' of the earliest Dialogues is 'made valid' in later Dialogues by the recognition of universals as 'metaphysically real'. One wishes that Socrates were here to cross-question these myopic people and to discredit once for all a tradition of piecemeal exegesis which has succeeded in marking off Plato's text as the special preserve of scholasticism and in making his thought insignificant. Prof. Taylor's little book, then, is to be welcomed as opposed in its whole spirit to this scholastic tradition and as actually bound by its trammels to no very serious extent. "My object," he says, "has been to sit as loose as possible to all traditional expositions of Platonism and to give in broad outlines the personal impression of the philosopher's thought which I have derived from repeated study of the Platonic text."

As I said, it is as Methodology that Prof. Taylor understands

the Doctrine of Ideas. "To sum up," he writes on pages 71, 72, "Plato's doctrine of 'Ideas' seems to culminate in the thought that the whole existing universe forms a system exhibiting that character of precise and determinate order and law of which we find the ideal type in the inter-connected concepts of a perfected deductive science. When he says that sensible things are 'copies' of the Ideas which are the true objects of science, what he means is that they exhibit everywhere what we now speak of as 'conformity to law'. But for Plato, we must remember, the conformity is never complete in the sensible world; there is an element in all actual sensible experience which defies precise measurement and calculation. Absolute and exact 'conformity to law' is to be found only in the ideal constructions of a pure conceptual science. Or, in other words, so far as such uniformity is actually 'verifiable' in 'experience,' it is only approximate; so far as it is exact and complete, it is always a 'transcendent' ideal. And here, again, his conclusion does not seem to be very different from that of the profoundest modern reflexion upon science and her methods."

I will not start the question whether Prof. Taylor is right in regarding the Doctrine of Ideas as only methodological; it is sufficient for my present purpose of indicating the great importance of his little book, to call attention to the fact that it does not, like most recent works, ignore altogether, or underestimate, the methodological significance of the Doctrine, but, on the contrary, dwells on it, and exhibits it with quite remarkable clearness and comprehensiveness of survey. There is no piecemeal exegesis in Prof. Taylor's book. The Doctrine of Ideas, for him, is solid throughout the whole series of the Dialogues (see pp. 46, 47). But where does it first appear? Prof. Taylor holds, with most critics, that it does not yet appear in the earliest Dialogues, those of the so-called 'Socratic Group' (see p. 26). Here I venture to differ from Prof. Taylor and the critics: and I do so because I attach paramount importance to the position which 'The Good' occupies in these earliest Dialogues. The one point always insisted upon by the 'Socrates' of these Dialogues is that no *εἶδος* is to be taken separately, but must always be viewed as a member of the System of 'The Good'. We therefore have not to go on to later Dialogues in order to see the *εἶδος* of the Socratic Group 'made valid'—that is the stock-phrase—by being transformed into something entirely different, into the 'Platonic Idea'. It is already the 'Platonic Idea,' for the 'Platonic Idea' is just the specific form or *εἶδος*, in each case, viewed, as the 'Socrates' of the earliest Dialogues insists that it must be viewed, in the light of 'The Good,' the System to which it belongs. The Dialogues of the 'Socratic Group' with their insistence on the primacy of 'The Good' anticipate what is essential in the passage at the end of the sixth book of the *Republic* where the Doctrine of Ideas receives its most ample expression as Methodology. I do not find evidence in his book that this point has struck Prof. Taylor; although I venture

to think that it is one the importance of which he is bound, on his general view of the methodological significance of the Doctrine of Ideas, to recognise. Of course, that the conventional expositors, who entirely ignore, or underestimate, the methodological significance of the Doctrine of Ideas, should fail to recognise the Dialogues of the 'Socratic Group' as important for that Doctrine need cause no surprise. And there is another reason why I venture to call Prof. Taylor back to the 'Socratic Group'. These Dialogues, concerned, as they are, with what is most essential in the Doctrine of Ideas regarded as Methodology, with the relation of the separate εἶδη to 'The Good,' with the inherence of the separate concepts of scientific thinking in a connected system of knowledge, deal with their methodological theme without giving evidence of the influence of mathematics which Prof. Taylor holds to have been that to which Plato's Doctrine of Ideas must be primarily traced. The environment of the Doctrine in the earliest Dialogues is ethical, not mathematical; and this, indeed, its environment continues to be—in the *Phædo*, in the *Republic*, in the *Phædrus*, in the *Symposium*; while even in the *Theætetus*, *Sophist* and *Parmenides*, where Plato's task is to make explicit the general or *a priori* conditions of thought (τὰ κοινά, τὰ μέγιστα τῶν εἰδῶν, he calls them to distinguish them from the specific forms sought for in various departments of inquiry), the influence of mathematics does not seem to me to be particularly in evidence. Of course I do not deny that the author of the educational curriculum outlined in the *Republic* attached great importance to mathematics as the discipline which prepares one naturally capable of connected thinking (τὸν συνοπτικόν) for the large exercise of his capacity in 'dialectic'; but I cannot follow Prof. Taylor in restricting 'dialectic' as he seems to restrict it in the following passage (p. 69)—"Something like the reduction of pure mathematics to exact logic effected by writers like Peano, Frege, and Russell, was avowedly the goal at which Plato was aiming in his 'dialectic'"—and see also pages 56, 57. This view of the goal of 'dialectic' seems to me to make the distinction between προοίμιον and νόμος (see *Rep.*, 531 D) insignificant. 'Dialectic,' I take it, has little to do with the aim of modern 'logistic'. The ἰδέα τοῦ ἀγαθοῦ, the ἀντιθέτος ἀρχή, which the Statesman must lay hold of, is something greater than the ultimate logical ground of mathematical principles; it is nothing less than a connected view of the whole world which makes, not only the ἐπιθέσεις of mathematics, but the principles of all the special 'arts,' and especially the principles of the 'art' of conduct, intelligible. I cannot suppose that Prof. Taylor would deny this—indeed there are passages in which he affirms it; but the close parallel which he draws between 'logistic' and 'dialectic'—even when the difference between them is explained (see p. 57)—leaves one with the impression that the Philosopher-King, according to Prof. Taylor, will regard the Philosophy of Mathematics as the chief end of his Dialectic. This is certainly not the impression which the *Republic*

leaves one with. I cannot help thinking, then, that Prof. Taylor's view of the influence of mathematics upon Plato's Doctrine of Ideas is somewhat exaggerated, and that it gives his, in the main, excellent sketch of that Doctrine as Methodology the appearance of being a little out of drawing. Indeed I would go the length of saying that Prof. Taylor is sometimes led by this view to commit himself to *obiter dicta*, like that on page 52—"Where 'experience' begins, science, in Plato's opinion, leaves off"—which, if taken literally, would empty the Doctrine of Ideas of any methodological significance whatsoever. Surely Plato believes in the possibility of 'Political Science' as a construction of thought for which 'experience' supplies the data. Political Science is just the interpretation of certain data of 'experience' by means of 'Ideas'. To say that "where 'experience' begins, science leaves off" is to say that the Ideas exist without function—that to regard them as explaining particulars is not to regard them as 'science' requires. But this can hardly be the meaning which the writer of the MIND articles on the *Parmenides* really wishes to convey.

It is in conformity too with Prof. Taylor's, I think exaggerated, view of the influence of mathematics upon Plato's Doctrine of Ideas that he says (p. 94): "For the Platonic *Philosophy* the myths can hardly be said to have any direct significance. For in Plato's opinion knowledge is entirely concerned with the transcendent concepts of pure deductive science. . . . The notion common since the days of Neo-Platonism, that the myth is the appropriate form in which to symbolise truths too sublime for rational comprehension is entirely foreign to Plato. It is precisely when he is dealing with what he regards as the ultimate realities that his language is most 'scientific' and least mythical." Here Prof. Taylor seems to me to limit the scope of 'Platonic *Philosophy*' unduly. For what are these 'transcendent' concepts with which 'knowledge is entirely concerned'? They are, *qua* 'transcendent,' *Ideals*, as Prof. Taylor himself points out in an excellent passage on pages 48, 49. It is as *Ideals*, then, I would submit, that the concepts with which 'knowledge is entirely concerned' find natural expression in myth. Thus the *Republic*, taken as one great whole, is a myth setting forth the 'transcendent concept' or Ideal of *Justice*. This is the broad truth of the matter, and is not contradicted by the numberless passages, in the *Republic* and elsewhere, in which that and other concepts are expressed in the language, not of myth, but of science. The scientific expression, the definition, of an Ideal, it must be remembered, is necessarily subsequent to our experience of its attractive power. This experience, belonging, as it does, to the conative rather than to the cognitive part of human nature, finds its natural expression in the visions and language of myth: then comes the time when the attempt is made to 'define' the Ideal. But the 'definition' can never be final. This we now see clearly. We see that it is in virtue of its attractive

power, not as 'defined,' that the transcendent concept or Ideal is 'eternal and immutable'. How does Plato stand here? Is there a sense in which he may be said to see as we do? Against the numberless passages in which he uses the language of 'conceptual realism' (see pp. 43 ff.) about the 'Ideas,' speaking of them as 'eternal and immutable' objects of scientific knowledge, it is only fair to set the weighty fact that, together with Soul, Cosmos and God, they also find mythical expression in his *Philosophy*. It is evident that he is not entirely satisfied with the 'conceptual realism' which yet bulks so largely in his writings. The attractive power of the Ideal, as well as its clear definition, claims his attention. What I would call 'aesthetic realism' finds a place in his system by the side of 'conceptual realism'. But I will not go into this matter, or discuss the adjacent question whether Prof. Taylor is right in regarding the Doctrine of Ideas as only methodological. This notice will serve its purpose if it calls the attention of Plato-scholars to a book the size of which must not be taken as measure of its importance as an able exposition of a too-much neglected subject, the methodological significance of the Doctrine of Ideas.

J. A. STEWART.

---

*Idealism as a Practical Creed.* By HENRY JONES, LL.D., Professor of Moral Philosophy, University of Glasgow. Maclehoose, 1909. Pp. 299.

PROF. JONES'S book is the substance, perhaps I ought to say the highly finished product, of the material of a course of lectures delivered before the University of Sydney on Philosophy and Modern Life. By a happy thought it is addressed to the young Australian people and reminds us of some historical addresses by German philosophers to their rising country at the beginning of last century. The analogy seems to have struck the writer himself, who begins with a quotation from Hegel's inaugural lecture to his students at Heidelberg in 1816, and develops through seven lectures an eloquent summons to "self-contemplation and self-reflection" with a view to employing "more fully and less wastefully the greatest of all the energies of the world, namely, those which reside within a people's character". In this, which may be called the practical and edifying aim of the book, the readers of MIND may be supposed to be less interested. But, as we might expect from the writer, his chapters have another side. "Man," he tells us, "is never at his best or highest except when he is in touch with ultimate issues." The reader feels that Prof. Jones has this touch from the beginning, and succeeds in giving us in wonderfully short compass and in highly literary form the ripe conclusions of his own thought and experience upon some of the main philosophical issues of our time. From this point of view the book may be regarded as a freshly stated argu-

ment for Idealism in the sense which Green and Caird have made familiar, falling into three parts : the light it throws on the history of civilisation ; on the assumptions that underlie the teaching of the spiritual leaders of last century ; and in the deeper spiritual needs of the time, its answer to the "call of the age". The first part consists of three finely conceived chapters on Freedom, "first the blade," "then the ear," after that "the full corn" in the ear. Man is by nature free, but "the nature of a thing which grows is the last of all its achievements". "A developing being is what it can become, and yet it must become what it is." In the case of man this last achievement is free devotion to the life of the spirit as it manifests itself in man's highest productions, whether as the State, knowledge, art or religion. It is reached through a process involving the successive stages of unconscious assimilation of an outer social environment, the withdrawal into the inner and individual as something opposed to it and the reconciliation of inner with outer through the insight that, however apparently external, the latter contains the promise and potency of the spirit's own inward reality. Inasmuch as from the second of these stages we look back on the first, in which the individual lives in custom and accepts direction from the law and consecrated authority which support it, we are apt to conceive of it as the age of faith as opposed to reason. But this is to forget whence tradition has derived its power. "Great and powerful as a people's tradition is it has been built up like coral islands amidst the deep from the many little reasons and insignificant purposes of insignificant man." "There is no customary opinion which was not once a bold conception, and no habit which was not at one time a venturesome enterprise." In turning its back therefore upon tradition reason is cutting itself off from its own substance—seeking to make for itself a habitation in the void. From this it only returns when "truths are discovered in the repudiated creeds, institutions which are useful and ways of life which are honourable and of good report are found among the *débris* of the old social and political world".

All this is familiar to the student of Hegel's philosophy of history, but if it is true we cannot be too often reminded of its bearing on our view of the world. "Any one," says Eucken in a similar connexion, "who is ready to deny that there is truth in such a movement as this must have a very low opinion of the forces which have been and are at work in the world. The man who undertook to prove that this movement was nothing more than a product of human self-will would find that the logical development of his principles made it very difficult for him to escape absolute scepticism." The moral that Prof. Jones draws is also one which the German leader, of whom he reminds us, presses in his *Life of the Spirit*, viz., that the practical business upon which the world is now engaged, "whether in its commerce or its industries, or in its science and philosophy, or in the battles of the sects and the war of the

politicians," is that of making real the ideals of those who seek to find in the complex conditions of modern life and with the fulness and universality demanded by Christian democracy the freedom and rationality that the Greeks discovered in a brilliant simplification.

In the sections that follow the writer shows the same powers of literary interpretation that are familiar to the readers of his *Browning*. Those who object to the Hegelianising of poetry will find much of their criticism blunted by the excellent sections on the relation between poetry and philosophy, the conclusion of which is that the quarrel between them, like other quarrels, "is apt to disappear when the combatants are at their best". Real poetry has "its enduring view of life," while philosophy when it is truly alive is ever seeking to break away from the mechanism of "system" and to show itself as the life-pulse of an expanding comprehending experience. Like poetry and religion itself it has come not to strangle experience in the serpent grip of logical formulæ, but that experience may have life and have it more abundantly.

Nevertheless the first effect of Idealism may very well seem to be to increase the discord that thought when applied to our deeper experience brings with it. It seeks to justify the identification of the Divine with the good in human life, which is the breath and spirit of all poetry. But in implicating God with the good do we not implicate Him also with the bad? Granted "God in Us" for good, is He not in us for evil also? It is to the question in this which he takes to be its ultimate form that the writer addresses himself in his last chapter, to which the readers of *MIND* will naturally turn for his contribution to current speculation. The treatment they will be apt to complain is too cursory. Starting from the position that evil is no illusion, the writer puts the question whether it stands out as a mere external limit of good or is a relative reality, and presses the alternative on the notice of those who are tempted to put forward certain "hybrid schemes" which evade instead of solving the problem. In the former case nothing stands between us and a broken and in the last resort a hopeless world. Good, we are told, is everywhere limited by evil and is only known to us in the making. This may be true enough, but if this is all that is to be said, to what are we to look for the making of it? If, on the other hand, we have advanced beyond this mere opposition to a real relativity we have got beyond the mere duality of the terms; we have sighted a unity beneath them and raised the problem to a new level. But the difficulty remains as to the mode of interpreting the unity. Here again the writer finds himself faced by two alternative interpretations. Either it is a *tertium quid*, in which the opposites disappear, or it is to be found in the dominant quality of one of them. The argument is here highly condensed, but it leaves us with no doubt as to where Idealism, as Prof. Jones understands it, must take its stand. Correlation is not necessarily co-ordination, but is com-



patible with the dominance of one of the correlatives. The higher we go in the scale of objects the more do we find that the poles of Nature's opposites disequilibrate. "Environment and organism, object and subject, means and purpose are mutually implicative, but they are not upon a par. And it is possible that error and truth, evil and good, necessity and freedom, nature and spirit, the finite, the infinite are in like case."

Considering the limits it is perhaps ungracious to ask for more when so much is given, but Prof. Jones would be the last to tolerate the suggestion of untempered mortar in any part of his foundations, and he will be the first to forgive the attempt to indicate where under freer conditions the argument would seem to require strengthening. Granting that correlatives need not be co-ordinates, but that one side may take the lead and dominate, what does such dominance mean? It will not be contended that it means the simple annihilation of its opposite. It must clearly be conceived of as some sort of assimilation or absorption. But in that case we have to explain how evil can thus enter, and, as we must suppose, enrich the contents of the result and yet remain real evil. But a more serious point remains. Granted we can explain how unity is reached by the subordination of one of the elements, how good triumphs over evil, the infinite and universal over the finite and particular, on which side are we to say that individuality falls? Are we to look for it on the plane of conflict in the flash of the encounter, the 'spark' of the opposite fields, or in the whole or system of which the sparks are a mere effluence. In the first case we have a theory which may possess all the inspiration the writer claims for it, but hardly one that corresponds to current theism. In the second case we leave room for a form of theism, but is it not at the expense of setting up just such a *tertium quid* and recurring just to the alternative we rejected at a previous stage of the argument? These are no doubt some of the "difficulties of its own" which the theory, on the author's admission, brings, and he will tell us they are another and a longer story. We agree, but it is because we have the one from him that we want the other also.

J. H. MUIRHEAD.

## VI.—NEW BOOKS.

*La Morale Rationnelle dans ses relations avec la Philosophie Générale.*  
Par ALBERT LECLÈRE. Paris: Félix Alcan; Lausanne: Payot et Cie, 1908. Pp. 543.

M. LECLÈRE in his book undertakes a great enterprise. He sets out to construct an Ethics which shall be Rational and at the same time in accordance with Common Sense—with the natural deliverances of the Moral Consciousness. (By Rational he means *a priori* as distinct from *a posteriori*, empirical, merely particular.) This ambitious endeavour is carried through with great spirit and supported by wide learning; and a courageous attempt is made to deal with two problems which are perhaps the most difficult in Ethics: (1) the relation of what *ought to be* to what *is* (of Good to Reality); and (2) the competing claims of Self and Others (which has often presented itself as the conflict between Happiness and Virtue). For the solution of the first of these it is clearly necessary to go beyond the region of Ethics itself—in fact the question is one of the deepest in Philosophy. As we shall see, M. Leclère attempts to solve it by identifying Good and Being, Being and God. As regards conflict between the claims, for any moral agent, of Self and Others, it is attempted to solve this by identification of the Being of Self with the Being of Others—and further, that of Self and all these other Beings with the Being of God.

I will indicate the order of topics in the book, and examine briefly some of the positions above referred to.

Part i. is concerned with the Foundations of Rational Morality and part ii. with (1) Theoretical and (2) Practical Morality. The first part contains chapters on the idea of a Rational Morality, the Relation between Morality and Religion, and between Science, Philosophy and Religion. Then follows a chapter on the comparative value of the fundamental Types of Ethics—including the Hedonist, Sentimentalist (the school of Moralists who regard Ethics as a theory of Moral Sentiments), Metaphysical, and Critical forms. This study of Moral Systems is succeeded in chapter v. by a more concrete and historical treatment of the same topic.

Book i. of part. ii. considers Inductive Ethology, Etho-Criticism, Meta-morality and Deductive Ethology, and book ii. contains a preliminary chapter on the ultimate principles of Practical Morality, followed by a consideration of (*a*) Individualistic (or Self-regarding) Morality, and (*b*) Social (or extra-regarding) Morality. From (*a*) and (*b*) are deduced in succeeding chapters the Morality of the Family, and Civic and Cosmopolitan Morality, and the closing chapter is concerned with Religious Morality within the limits of Philosophy.

The author announces his general aim to be that of outlining Rational Morality in its relations with Philosophy (from which he holds it to be inseparable), and of thus establishing a doctrine that may bring together

the most different minds, and receive a development possessing genuine coherence, and unity of principle. This principle, M. Leclère goes on to say, is Reason itself, which is essentially one, and everywhere identical. The poetical Idealism of some Moralists with their flights of fancy, is, he observes, as unsatisfactory as the rigid scientific procedure of others, who tend to identify Morality with positive knowledge. He passes to 'Traditional Criticism' which is said to indicate, when duly interrogated, that the right ethical method is just to seek that which Kant desired but despaired of finding—namely, a means of connecting the essential ideas of morality with the idea of Pure Reason—with Thought itself. Morality in fact requires an *absolute basis*, and must be founded on Metaphysics, for it must somehow be linked to reality, and since it cannot be so linked by Science (=Science of what is, which can only provide a Prolegomena to Ethics) the connexion must be by means of Metaphysics—a Spiritual Metaphysics moreover, such as, *e.g.*, the Monadism of Leibniz—Morality being concerned with the psychical and not with the material.

As regards the relation of Ethics and Religion the view is taken that all religion is extra-philosophic and that therefore it needs to be kept distinct from both Philosophy and Morals.

The methodological considerations of the chapter on the relations of Science, Philosophy and Morality lead up to a detailed definition on page 90, according to which Morality is the Science of the positive conditions, individual and social, of the normal moral judgment; of the relation of this judgment to Thought in general, and of the object of the judgment to Being in general; finally, it is the Science of the means which knowledge may use to bring about the harmony of the moral judgment with the nature of the being who pronounces it, and of the universe to which he belongs.

At the end of chapter v. (Fundamental Types of Ethics) the conclusion is reached that the ethical point of view satisfactory to Reason is a synthesis of systems, in which a 'Spiritual Metaphysics' is accepted and the 'Critical' position adopted that all ethical principles theoretical or practical have a genetic relation to Thought. In this Synthesis, Experience bears its part, and contributes knowledge of the facts of the moral life. And this point of view is supposed to be that to which normal thought (Common Sense) is naturally disposed (p. 177).

It is, of course, not possible even to glance through the historical sweep of chapter v., which ranges from Antiquity, the Middle Ages, and the Renaissance, to the 'Modern' (or 'Contemporary') ethical thought of France, England and Germany. I will allow myself, however, a few remarks on the section which deals with English thought.

On page 264 M. Leclère groups together "*Les Cudworth, les Cumberland, les Clarke, les Wollaston, les Price*," as moralists who are "too exclusively logicians; who see, in the Good nothing but the general realisation of the True by voluntary action". But, to quote Sidgwick's *History of Ethics* (to which M. Leclère refers in another place)—"for Cudworth the distinctions of good and evil have an objective reality cognisable by reason, no less than the relations of space or number," and Cumberland "is noteworthy as having been the first to lay down that 'the common good of all' is the supreme end and standard, in subordination to which all other rules and virtues are to be determined". And Price (more than a hundred years later) "takes pains to exhibit the self-evidence both of universal benevolence and of rational self-love". Indeed it is only as applied to Clarke and Wollaston that M. Leclère's statement is in any degree plausible, and even of their views (and especially of Clarke's) it presents a one-sided and therefore unfair account.

There is a strange inversion of the title of Mandeville's book when it is said (p. 262) that he "opposes to the private utility of virtue the social utility of vice". And when on page 263 it is said that "*Butler* speaks of duty in a fashion which we could not have expected from a Sentimentalist," it almost seems as though the writer, having for some reason labelled Butler with the name 'Sentimentalist,' were guided in his judgment of what that great Moralist ought to say rather by reference to this name, than by reference to the whole tenor of his ethical thought.

Again on page 268 we read that "*Les Lewes, les Sidgwick, les Murphy*, allèrent depuis Mill où allaient de leur côté, depuis Spencer et Darwin, les *Clifford, les Baratt (?)*, les *Leslie Stephen*, vers l'Intellectualisme, vers un Sentimentalisme plus ou moins sociologique et mystique". To group Sidgwick with Lewes and Murphy, and then to speak of the two former (I know nothing about Murphy) as tending in Ethics towards a "Sentimentalisme sociologique et mystique," indicates an unexpected lack of acquaintance with the greatest of contemporary English Moralists.

Having dealt in part i. with the foundations of Rational Morality, the Author proceeds in part ii. to construct inductively and deductively that Morality itself. The first chapter—Inductive Ethology—is a sort of brief Physics of conduct, obtained by study of human nature at first hand—an inductive empirical study, by means of which we endeavour to grasp moral facts directly in their psychic reality—whereas the business of Etho-criticism in chapter ii. is to demonstrate the *a priori* character of certain of these facts. This service, it is explained, can only be accomplished by processes of pure reasoning altogether different from the observational procedure of ethology.

The concepts of the moral consciousness and their reciprocal relations are examined—Sanction, Merit, Responsibility (which involves Freedom), etc. Sanction—the most complex of these notions and including all the rest—is the idea of (experimentally known) joy or suffering, due to men as good or bad. It includes also the metaphysical ideas of a justice which requires that joy and suffering should be dispensed according to moral worth, of a superior power immanent, transcendent, or purely ideal, of a real and free moral agent, of the effective reality of moral worth, and of the three simple moral ideas of Good, of Right and of Obligation.

The Author affirms that the moral consciousness as here described, corresponds to ordinary morality, and that it is metaphysical, individualistic, and coherent throughout. Social inductive Ethology shows that morality, far from being a product of Society, is the principal source of Social progress; the corresponding Ethology of the *individual* logically connects all the content of the moral consciousness with ideas which can proceed only from the individual mind. Psychology, Sociology and Biology all combine to show that this is so, and that Rational Morality could not have had a merely 'empirical' origin (p. 379).

The idea of Good is said to cover the whole region of Ethical thought (p. 336)—there is no simpler idea to which it can be reduced. "Yet, the idea of Good is not self-sufficing, it is necessary that Good should be something other than Good in order to be thinkable." What is this 'Other'? We may no doubt define the Good as the rational in *Being and Action*, and psychologically, the idea of Good is here said to be that which is Rational and approved. (It is difficult to see why Good is affirmed to be in itself unthinkable, and how, if so, it can be made intelligible by 'identifying' it with Being—see below.)

Good, the Author proceeds, manifestly includes Right and Duty, and Morality as Rational is connected with both Logic and Ontology. Con-

tinuing, we learn that the only concepts which could possibly serve, as content or filling, to the idea of Good, are those of Happiness and of Being. Of these the idea of Happiness, though heterogeneous to that of Good, is, because of its *a posteriori* character, incapable of furnishing it with an intelligible content. It follows that the idea of Being, which while heterogeneous is also *a priori*, is capable of furnishing an intelligible content, and is the notion which is needed, and the ethological induction of chapter i. is seen to be complete.

We seem thus to have arrived at the Synthetic judgment from which chapter iv. (Deductive Ethology) starts, *viz.*, *The Good is Being*, and in chapter iii. (Meta-morality) it is supposed to be further shown that the idea of Good is the idea of God. God's existence is supposed to be proved by help of the idea of Cause—this idea is declared to be absolutely rational, an essential demand of Reason, the ultimate source of scientific speculation—hence for Reason to refuse to apply the idea of Cause to the world in its totality, would be suicidal. And if Good is identical with Being and proportional to the intensive quantity of Being, God is the Good itself. The mystery of Being without God is greater than the mystery of God, which introduces into Being so much intelligibility (pp. 433-434). This reasoning seems very inadequate, but I have not succeeded (in a somewhat hasty perusal, it is true) in finding anything more convincing.

The oneness of different beings is asserted unconditionally in the following passages (among others): "Identity of nature in all beings, and especially the fact that there is no room either to distinguish one from another numerically, nor our reason from that Reason which is the soul of our own, nor my reason from the reason of my reader, prove directly that my being is essentially bound up with the Being whose one aspect is the Moral Law and his other aspect divine personal reality, as well as with beings similar to myself" (p. 440). And, again (p. 442), "Considering every being as essentially good and even at bottom divine, it [Rational Morality] could not disown the right of the most insignificant being to the respect of others, those others who are that being himself".

If all this is so, there can be no conflict between the claims of Virtue and Self-interest, no need for a Dualism of Practical Reason, no place for any ethical principles except those of self-regarding Ethics. But when we come to the principle given on page 440 as furnishing all that is necessary in the way of guidance—namely, *Be thyself*—it seems (even with the ingenious exposition and deduction on p. 441) to be very unequal to the needs even of self-regarding Ethics, not to speak of the Ethics of Social life, in which the greatest difficulty both theoretical and practical is to reconcile the claims of self and others.

The truth is, that in the effort to rationalise completely, everything that made a process of rationalisation necessary has been got rid of—the real world of mingled good and evil in which we live and move and have our being has been lost sight of entirely—there is no difficulty about unifying because everything is the same as everything else—and nothing is anything in particular. (It is not obvious why the Leibnizian Monadology should have been invoked.) The problem of Evil is so entirely ignored that an unqualified identification of Good with Being is acclaimed as satisfactory. The world is swept clean and clear by a series of verbal 'identifications'.

It is a pity that with so much learning and ability and enthusiasm, the Author should not have found a better way out of some of the difficulties with which thought—actual thinking—has to struggle when it tries to grasp and explain the work-a-day world, and to formulate a rational ethics for men who know that their interests and the interests of

others (not to speak of *themselves*) are *not* always identical—at any rate in this life—and who know, too, that there is Being that is very evil as well as Being that is very good.

Yet M. Leclère often displays both excellent critical insight and impartial good sense—and he sometimes forgets that every Being is every other Being. For instance, he allows (p. 493) that, in spite of the familiar proverb, a man's heart is not more constant than a woman's, and not more capable of strong affection—that marriages often turn out unhappily through the fault of husband or of wife, or both, "or perhaps by the fault of nature which made men and women so different that in some respects they are almost like two different species".

E. E. C. J.

*Psychologie de l'Enfant et Pédagogie Expérimentale.* By Prof. Ed. CLAPARÈDE. 2nd edition, revised and enlarged. Geneva: Librairie Kündig, 1909. Pp. viii, 282.

The first edition of this little work, which appeared as a collection of magazine articles at the close of 1905, became 'out of print' a few months after publication. The author regrets that since then he has not had the time to re-write the entire book so as to treat the subject more systematically and thoroughly. This new edition, however, has enabled him "to convey a more accurate picture of the present state of our young science of pedology and to emphasise the part played in mental life by *interest*, the psychological importance of which is still too little understood by educationists". He has omitted the chapter on memory which occurred in the first edition, and has substituted a long chapter (occupying nearly half the book) on mental development. This is followed by a chapter on intellectual fatigue and preceded by three short chapters dealing with the history, the problems and the methods of pedagogical psychology. A useful bibliographical summary is given at the close of each chapter.

Prof. Claparède is gifted with an easy pen, and on the whole, his views are distinguished by their moderation and their sanity. Indeed the chief value of the book lies in its very clear presentation of the scope of the subject and of the difficulties that lie in the path of future progress. The chapters on the problems and methods of pedagogical psychology are especially characterised by attractiveness of style and thoroughness of treatment. Doubtless there are several instances where experimental data are given which might advisedly have been introduced with greater reserve. This applies particularly to experiments on the determination of mental fatigue. These are too often accepted without adequate criticism, and it is only later, when the reader passes to the difficulties connected with the measurement of fatigue, that he may, if he have sufficient intelligence, be led to doubt the validity of the data to which he had earlier been too uncritically introduced.

The chief interest in the book centres in the long chapter on mental development. The true pedology, writes the author, "must be attractive: the matter taught must interest the pupil: and the activity that he will employ to acquire it, the work that he will perform to assimilate it and to become master of it, will quite naturally take the form of a game" (p. 120). At the same time, he admits that the child must learn to make effort. But, as he points out, "education of effort is not to be confused with education *by* effort. It is by no means obvious that the latter will bring about the former." Do you seriously believe, he asks, that *because* you have worried a boy with Latin, he will "offer greater resistance, when a man, to the temptations of life, be of better conduct, or display greater

courage as a citizen? . . . Let us look around, and we shall find quite the contrary the case" (pp. 121, 122). The author insists that interest must always be the pivot of education, and that *the one interest of which the child's mind is susceptible is that of play*. Intellectual food "must be absorbed with appetite if it is to be profitable to the consumer" (p. 129). He admits that "much has to be learnt although destitute of immediate interest, owing to the need of it later (*e.g.*, the multiplication table, writing or reading). Can the learning of these things take the form of games? Not directly perhaps, but indirectly it can. . . . In certain cases, perhaps, there will be difficulty, but this is exactly where the art of the educationist will reveal itself" (pp. 130, 131).

Enough has been quoted to show Dr. Claparède's views. For my own part, I am disposed to dissent from the most important of them. Looking back to my own childhood, I deny that games have always been my sole interest. Looking at my own children, I find their activities are governed by other motives than those of mere play. Surely from a very early age the germs of love, respect and duty are present, forbidding the child to regard the world as a convenience for the satisfaction of his immediate and selfish interests. And just as surely, it is the duty of the teacher to superintend the development of these germs.

C. S. MYERS.

*L'Éducation Morale Rationnelle.* Par ALBERT LECLÈRE, Professeur Agrégé à l'Université de Berne. Paris. Price, 3 fr. 50 c.

In the first part of this book the author explains at some length that education is important; that a child is almost infinitely plastic and will become what circumstances and education make him; that the family has great moral influence; that the school is second in importance only to the family; that literature, art, history, and science are useful subjects in indirect moral education; and that morals may also be taught in more direct ways. There is a good deal more freshness and value in M. Leclère's treatment of the education of elder lads and of young men; and he has some excellent remarks on the moralising power of all kinds of "voluntary associations". Most readers, I fear, will be a good deal hindered by the closeness of the print.

HELEN WODEHOUSE.

*Kritik der Philosophie vom Standpunkt der intuitiven Erkenntnis.* Von Dr. EUGEN HEINRICH SCHMITT. Leipzig: Fritz Eckhardt, 1908. Pp. 507.

The author of this "criticism" of Philosophy admits the right of natural science to make the dualistic assumption that knowledge is a representation or copy of some original; and he traces the failure of "Philosophy" to its inability to rid itself of the same assumption. Knowledge of nature, while it seeks to attain mental representations, as accurate as possible, of the "facts" it encounters in the outer world, takes no account of these representations or images themselves. Philosophy on the other hand deals with these primarily. It has committed the error, however, of regarding them as themselves objects to be represented. The philosopher has done with them what the student of nature rightly does with his sense-impressions—transmuted them under categories and forms of thought. In so doing he has falsified them. His effort ought to have been in the opposite direction. What he is dealing with, in the facts of consciousness, is reality, and the only reality we know at first hand. He should have made it his endeavour to disclose that reality, simply as it is given. With



a "lofty naïveté" he should seek to render his experience as it appears in the wholly unmodified form of "intuitive knowledge".

The writer finds the key to the nature of experience in certain differences of "dimension" analogous to the dimensions of geometrical science—"points" of sensation or feeling, "linear" strivings of the will, two-dimensional objects of sense-perception, three-dimensional objects of knowledge, and further higher dimensions which appear in the functions of thought, æsthetic consciousness, etc. Of these levels of experience—representations of the outer world—each higher amplifies the lower, filling up its lacunæ with greater accuracy and more detail. The true or full representation is made up from all these sources; but by a sort of "unavoidable optical illusion" the thought-function acquires a preponderating importance. Its work had given the picture a degree of adequacy almost infinitely greater than had been possible to the unaided lower functions. Hence its contribution comes to be taken as the only essential one—the rest, those of sensation, perception, imagination, etc., being dropped as irrelevant. Thought reveals reality; what is revealed in the lower phases of experience is appearance only.

The effort to give thought this overweening importance is Philosophy's mistaken way of going about a necessary task. What is necessary is to regain the unity of experience which had been forfeited whenever, in the course of historical development, these "infinite" differences of dimension came into clear consciousness. That such unity is to be attained by reducing all phases of experience to one, namely the thought-form, is a hypothesis the absurdity of which Philosophy has had to demonstrate by successive ages of failure to work it out. And the author devotes the second part of his book to a sketch of the history of the "Ingarten" of Philosophy, in which the main systems from Thales downwards are treated from this point of view. Philosophy's long ineffectual attempt to work an impossible hypothesis was necessary, but only as a clearing of the ground for the real task of philosophy, which is to hold fast to the full reality of all inner experiences, and disclose them as they appear.

J. W. SCOTT.

*Das Gedächtnis.* By Dr. MAX OFFNER, Professor in the K. Ludwig's Gymnasium, Munich. Berlin: Reuther & Reichard, 1909. Pp. 238. Price 3 marks.

Experimental psychology is comparatively a young science, but it has already so many enthusiastic workers that it is not easy for students of educational principles to keep in touch with the results of their investigations. During the last ten years, and since Ebbinghaus wrote his pioneer book, Wundt, Müller, Külpe and Neumann, not to mention a host of others, have been experimenting upon Memory, and have greatly added to the available knowledge of its conditions and effective operation. The value of this knowledge to all concerned with instruction and education is self-evident. The time was ripe for a clear and reliable review of the results of this widespread and varied experimentation. To provide such a review, and to show the application of the results to education is the aim of this book. The author has arranged his material in a clear and scientific way, and has written a treatise which should be valuable both to the psychologist and the teacher.

In view of the unity of mind, Memory cannot be treated as a thing apart. The volume therefore begins with a survey of the whole field of psychical experience, and an estimate of the place of Memory therein.

Sensation, Imagination and Association are shortly considered, but the

bulk of the book is devoted to the consideration of Dispositions. In the long chapter which deals with the strength of Dispositions, the author has set forth clearly the general outcome of recent investigations on the intensity and duration of the psychical experience, and on the number and nature of repetitions. Light is here thrown on the problem whether it is better to learn by wholes or by parts. The conditions and importance of Attention are naturally considered, and an estimate is made of the value of Rhythm, Rhyme, Alliteration and Assonance.

Chapter VI. is devoted to the questions involved in the stimulation and efficacy of Dispositions, in other words to the conditions of successful reproduction, or effective recall. It contains sections upon reproduction and feeling, and reproduction and Will.

The closing chapters discuss the individual and sexual varieties of Memory, the relations between age and Memory, between Memory and Intelligence.

The 'value of forgetting' is the subject which brings to a conclusion a book which should prove most useful. Its usefulness moreover will be greatly increased by the bibliography and index which are appended.

JOHN EDGAR.

*Abhandlungen zur Philosophie und ihrer Geschichte.* Herausgegeben von BENNO ERDMANN.

XXVIII.—*Die Philosophischen Lehren in Leibnizens Théodicée.* Von ADELHEID THÖNES. Halle-a-S.: Max Niemeyer, 1908. Pp. 79.

The author's object is to separate the philosophical content of the *Théodicée* from its theological setting, and to rehabilitate it so far as possible as an exposition of Leibniz's system. Beginning with a *résumé* of the controversy with Bayle, he works through his subject to the conclusion that all the leading principles of the Leibnizian system are represented, but that none of them is exhaustively expressed. Ethico-religious considerations predominate, and the dynamical and mathematical aspects of the system are inadequately treated. Traces of the principle of continuity and of the polemic against Descartes' dynamics are made out, but only obscurely. Of the theory of Substance (the later "Monadism") no completely apprehensible account is given, and for the doctrine of matter, which underlies the "Körperlehre," we find a noticeable hiatus. The exact limits of this omission are carefully indicated and the doctrine filled out from the correspondence with Arnauld, De Volder and Des Bosses.

XXIX.—*Über Christian Gabriel Fischers Vernünftige Gedanken von der Natur.* Von AUGUST KURZ. Halle-a-S.: Max Niemeyer, 1908. Pp. 55.

Christian Gabriel Fischer is a writer who lost his opportunities and whom even in his own lifetime, the current of events seems to have stranded on the tide of time: to-day in spite of Erdmann's work, his name is hardly known even in cultivated Germany. Yet if it were only for the enigmatic interest of his labours and their inexplicable cessation in the day of his triumph, he deserves a better fate. A Königsberg professor of the early eighteenth century, burdened with a scholastic method and working with *a priori* ideas upon the encyclopædic problems of the Aufklärung, he is at the same time a forerunner of the modern Fachwissenschaft, and he ends in positivism. As an example of the sort of contradictions that meet us everywhere: "Das ist echt Fischerisch, mitten in einen von

Widersprüchen starrenden antiquierten Gedankengänge, eine bedeutsame Konzeption der Neubildung von Arten vorzubringen". From an early theosophy he goes over to Spinozism. The discovery that "Ontologism tacitly presupposes the whole content of experience . . . opens the door to the influence of Hobbes," and finally, "das Resultat der Auseinandersetzung zwischen Hobbismus und Spinozismus ist der Tolandismus". The present treatise is marked by a subtle but strained characterisation, and though the writer may be wise to abandon his theme to its unreconciled oppositions, he is too apt, considering the tendencies of the age and the great parallels with which it could have furnished him, to make out a special case for Fischer, and to shelter himself from further responsibilities behind Goethe's warning: "Was weiss ein Mensch vom andern?"

XXX.—*Materie und Organismus bei Leibniz.* Von HANS LUDWIG KOCH. Halle a-S.: Max Niemeyer, 1908. Pp. viii, 59.

Taking as his guiding principle the view that it is not enough to seek a harmony in the system he expounds, and that "the harmonious development of his philosophy from his scientific thought, so often emphasised by Leibniz himself, is not sufficiently appreciated where one sees in Leibniz only the great artist of philosophic speculation, the author, in two chapters condensed from original sources, shows clearly by what stages the conception of "primitive" and "derivative Kraft" are evolved out of initial mathematical notions as regards matter. In contrast to Descartes' identification of body and extension, the early *Confessio Naturæ* emphasises the *existence in space* as the fundamental character. A letter to Thomasius adds impenetrability to the definition, and impenetrability yields the idea of motion, which it implicitly contains. In the *Hypothesis Physica Nova* the idea of continuity is developed, and from this idea, applied to motion, the conception of body as a function of motion is evolved. Motion in turn reveals itself as relative to mind, and all body must consequently have mind as a "principium motus" or "substantia". The idea of motion (along with that of space) having become relative, it is no longer of use as containing an explanation of the future motions of bodies, and this leads Leibniz to the new idea of "Kraft," derived from Huygens. The argument shows how the mathematical and dynamical laws of "Kraft" rest on, and are restricted by, metaphysical principles, from which spring the distinctions of "primitive" and "derivative Kraft" and the relation of soul and body. In the world of consciousness the soul is a unity analogous to "primitive Kraft" in the world of extension; and, on the other hand, the phenomenal "Scheinbild der Masse" which appears to the soul results from the "confused perceptions"—"in demselben Sinne . . . wie man aus der primitiven passiven Kraft vermöge der Infinitesimalrechnung die derivative passive Kraft der Masse resultieren lässt". The writer notices Leibniz's inconsistency in designating the "primitive Kraft" by the term "materia prima," which must mean, not a "substance" but "the pure passive principle incomplete when abstracted from soul". Soul is identified with the *form* of body, which in turn is the matter of soul; and the argument is carried over to the lower organisms, which are shown to be also substantial forms. The theory of matter is the "middlepoint" of Leibniz's system, and not a "verworrenes" Anhängsel. Substance is a deduction from phenomenal appearance, and it is only when he tries to reverse the argument and to begin with self-contained, isolated substances that Leibniz must resort to a pre-established harmony.

XXXI.—*Das Verhältnis der Verstandeserkenntnis zur Sinnlichen in der Vorsokratischen Philosophie.* Von Dr. ERNST ARNDT. Halle-a-S.: Max Niemeyer, 1908. Pp. 57.

A single idea runs through this inquiry and marks the limits of the author's task. This idea is that the problem of knowledge up to the time of the sophists turns entirely upon its objective validity, and does not enter into the psychological or epistemological distinctions of knowledge as such. In defence of his thesis the writer argues, against Zeller, with some subtlety, that the words of Heraclitus, *κακοὶ μάρτυρες ἀνθρώποισιν ὀφθαλμοὶ καὶ ὅσα βαρβάρους ψυχὰς ἔχόντων*, do not imply an opposition of sense and thought but merely of a proper and improper use of the senses. "Schlechte Zeugen sind den Menschen Augen und Ohren, wenn sie Barbareenseelen haben." In Parmenides' system there are distinguished not two but three ways of knowledge, the *ἀληθὴς λόγος*, the *ψευδὴς λόγος* (the view of Heraclitus that not-being is) and the *βορῶν δόξα*. It is only the second of these that flatly contradicts the way of truth, and that because of its inherent contradiction. There is no inner opposition between the *ἀληθὴς λόγος* and the "opinions of mortals". They are merely mutually irrelevant as two distinct (the separation is admitted to be sharp) *provinces* (Gebiete) of knowledge; and the account which Parmenides thinks it necessary to give of the *βορῶν δόξα* (this is maintained to be genuinely *his*) shows that he recognised it as having a validity of its own. Demokritus' Atomism is viewed as resting not on an epistemological distinction of fixed rational knowledge and the relativism of sense, but as being a scientific hypothesis, falling entirely within the province of sense experience, and intended to mediate between the two ways of knowledge in Parmenides' system.

A. A. B.

Über die Erkennbarkeit der Gegenstände. Von HANS PICHLER. Wien u. Leipzig: Wilhelm Braumüller, 1909. Pp. 105.

The author connects his acute brochure with Meinong's inquiries, and works to a point of view which he finds practically identical with Wolf's theory of the *ratio sufficiens*. Combating the critical distinctions and the subjectivism of Kant, he bases the universality of knowledge (Erkenntnis) not on the priority of intellectual rules but on the already necessarily objective nature of truth; and the coherence of subject and predicate in universal judgments rests upon experimental adaptation and this in turn upon intuition. The subsumption of A under C where A is B and B, C, is "keine Denknöwendigkeit, sondern wesentliches Bedingsein". Space and time are treated as neither ideas (Begriffe) nor intuitions but objects, and, further, as in no wise *sui generis*, but as systems, analogous to other systems, e.g. tone and colour, which share their systematic and dimensional characters. System is at the bottom of objective reality and the knowledge of this. "The condition of the possibility of systematic knowledge" lies in the "Seinsgrund des Individuellen," and such knowledge is "Ein Maximum an Erkenntnis bei einem Minimum an vorgegebener Kenntnis". "Given that nature is a system, that, taking the cosmic whole into consideration, there exists no mere contingency, then is scientific knowledge of nature possible, if not on geometrical, at least on systematic lines. Where nature then is not accessible to scientific apprehension (Erkenntnis), so as to give an answer to every question clearly put, the reason is that we fall short of the requisite minimum of Kenntnis" (pp. 86-87).

A. A. B.

Received also:—

- William James, *The Meaning of Truth*, a Sequel to Pragmatism, New York, etc., Longmans, 1909, pp. xxii, 298.
- Carveth Read, *Natural and Social Morals*, London, A. & C. Black, 1909, pp. xxv, 314.
- George Galloway, *The Principles of Religious Development*, a Psychological and Philosophical Study, London, Macmillan, 1909, pp. xx, 363.
- Henry Rutgers Marshall, *Consciousness*, London, Macmillan, 1909, pp. xv, 685.
- Edward Bradford Titchener, *A Text-Book of Psychology*, Part I., New York, Macmillan, 1909, pp. xvi, 311.
- George Trumbull Ladd, *Knowledge, Life and Reality*, London, Longmans, 1909, pp. 349.
- Francis Galton, *Essays in Eugenics*, London, The Eugenics Education Society, 1909, pp. 109.
- Rudolf Eucken, *The Problem of Human Life as Viewed by the Great Thinkers from Plato to the Present Time*, translated by Williston S. Hough and W. R. Boyce Gibson, London, Unwin, 1909, pp. xxv, 582.
- Rudolf Eucken, *The Meaning and Value of Life*, translated by Lucy Judge Gibson and W. R. Boyce Gibson, London, A. & C. Black, 1909, pp. ix, 157.
- Hugo Münsterberg, *Psychotherapy*, London, etc., Unwin, 1909, pp. x, 401.
- E. D. Fawcett, *The Individual and Reality*, London, Longmans, 1909, pp. xxiv, 449.
- R. G. Bury, *The Symposium of Plato*, with Introduction, Critical Notes and Commentary, Cambridge, Heffer & Sons; London, Simpkin, Marshall, 1909, pp. lxxi, 179.
- Benedetto Croce, *Æsthetic as Science of Expression and General Linguistic*, translated by Douglas Ainslie, London, Macmillan, 1909, pp. xxvi, 403.
- D. P. Rhodes, *The Philosophy of Change*, New York, Macmillan, 1909, pp. xxv, 389.
- Edward Bagnall Poulton, *Charles Darwin and the Origin of Species*, Addresses in America and England in the year of the Two Anniversaries, London, Longmans, 1909, pp. xv, 302.
- Maurice De Wulf, *History of Medieval Philosophy*, Third Edition, translated by P. Coffey, D.Ph., London, Longmans, 1909, pp. xii, 519.
- A. E. Crawley, *The Idea of the Soul*, London, A. & C. Black, 1909, pp. viii, 307.
- F. W. Headley, *Darwinism and Modern Socialism*, London, Methuen, 1909, pp. xv, 342.
- James Edwin Creighton, *An Introductory Logic*, Third Edition, Revised and Enlarged, New York, Macmillan, 1909, pp. xvi, 520.
- Norman Alliston, *In the Abstract*, London, Sonnenschein, 1909, pp. 156.
- Joseph Samuelson, *The Human Race, Its Past, Present and Probable Future*, London, Sonnenschein, 1910, pp. xii, 192.
- Satis Chandra Vidyabhusana, *History of the Medieval School of Indian Logic*, Calcutta, The University, 1909, pp. xxi, 188.
- M. C. Nanjunda Row, *Cosmic Consciousness, or the Vedantic Idea of Realisation, or Mukti in the Light of Modern Psychology*, Madras, Natesan, 1909, pp. x, 237.
- A. Somerset Day, *Deborah and Barak, A Message for To-morrow*, privately printed, 1909, pp. 52.

- Joseph Miller, *Sermons Literary and Scientific*, 1909, pp. xi, 416.
- Aleš Hrdlička, *Tuberculosis among certain Indian Tribes of the United States*, Smithsonian Bulletin, Washington, 1909, pp. 48, plates 22.
- Jessie Walter Fewkes, *Antiquities of the Mesa Verde National Park, Spruce-Tree House*, Smithsonian Bulletin, Washington, 1909, pp. 57, plates 21.
- The Equinox*, vol. i., No. ii., London, Simpkin, Marshall, Sept., 1909, pp. 397.
- Hobbes's Leviathan*, reprinted from the edition of 1651, with an Essay by the late W. G. Pogson Smith, Oxford, Clarendon Press, 1909, pp. xxxi, 557.
- Roger Bacon, *Opera hactenus inedita*, Fasc. I. *De Vicis Contractis in Studio Theologie, Fragmenta quae supersunt nunc primum*, edidit Robert Steele, Oxford, Clarendon Press, pp. viii, 56; Fasc. II. *Liber Primus Communium Naturalium Fratris Rogeri, Partes Prima et Secunda*, edidit Robert Steele, Oxford, Clarendon Press, pp. iv, 137.
- Cambridge History of English Literature*, vol. iv. (contains a chapter on "The Beginnings of English Philosophy," by W. R. Sorley), Cambridge, University Press, 1909.
- Th. Ribot, *Problèmes de Psychologie Affective*, Paris, Alcan, 1910, pp. 172.
- Georges Remacle, *La Philosophie de S. S. Laurie*, Bruxelles, Weissenbruch, Lamertin, 1909, pp. xxxii, 524.
- Georges Lechalas, *Étude sur l'Espace et le Temps*, 2e édition, revue et augmentée, Paris, Alcan, 1910, pp. 327.
- Louis-Germain Lévy, *Une Religion Rationnelle et Laïque*, Paris, Émile Nourry, 1908, pp. 113.
- Berthold Kern, *Das Erkenntnisproblem und seine kritische Lösung*, Berlin, Hirschwald, 1910, pp. 195.
- Jacques Loeb, *Die Bedeutung der Tropismen für die Psychologie*, Leipzig, Barth, 1909, pp. 51.
- Hugo Bergmann, *Das Philosophische Werk Bernard Bolzanos, nebst einem Anhang: Bolzanos Beiträge zur philosophischen Grundlegung der Mathematik*, Halle, Niemeyer, 1909, pp. xiv, 230.
- Max Offner, *Die günstige Ermüdung*, Berlin, Reuter and Reichard, 1910, pp. vi, 88.
- Albert Steenbergen, *Henri Bergsons Intuitive Philosophie*, Jena, Eagen Diederichs, 1909, pp. 110.
- Lehrproben und Lehrgänge aus der Praxis der höheren Lehranstalten*, Generalregister zu Heft 1-100, Halle, Waisenhaus, London, Williams & Norgate, 1909, pp. 98.

## VII.—PHILOSOPHICAL PERIODICALS.

PHILOSOPHICAL REVIEW. Vol. xviii., No. 4. **A. O. Lovejoy.** 'The Meaning of *Φύσις* in the Greek Physiologists.' [Two interpretations have been given to the term *φύσις*, the 'process of becoming,' and the 'essential character of the primary substance'. No one of the *loci classici* demands the former meaning, while there are three considerations that support the latter: the sense ordinarily taken on by the word in literary usage, the express explanations of Plato, Aristotle and Theophrastus, and the employment of the dative with adverbial force, both by the later physiologists and by the Sophistic moralists, to point the contrast between the objectively valid and the subjectively apparent. Hence it may be concluded that the physiologists sought, not a formula of cosmic evolution, but a consistent conception of reality as it is 'in itself'.] **E. A. Singer.** 'Kant's First Antinomy.' [Kant is essentially correct; no possible experiment could decide the issue between a finite and an infinite distribution of bodies in space, a finite and an infinite world-history. The interest of the problem and its discussion centres in the definition of a fact; Kant seems to teach that it is of the nature of a fact to be unknowable, though unknowable only in the sense that an ideal is unattainable. All statements of fact must retain an expression for probable error, and must yield a definition of possible sources of constant error.] **G. A. de Laguna.** 'The Practical Character of Reality.' [Pragmatism has two distinctive doctrines: immediatism and instrumentalism. Immediatism, the pragmatist's substitute for ontology, declares that reality is what it is experienced-as. But it is impossible that universals be immediately experienced; it is impossible to reduce meaning to existence; and since we experience the real only as the outcome of the knowing-experience, it cannot be the real that is changed by the process of knowing. Instrumentalism, on the other hand, may be employed to reinterpret the definition of reality offered by absolute idealism; this may be considered as the description of an ideal limit, analogous to the fundamental formulae of mathematics, with the same advantages and the same defects. Both immediatism and absolute idealism err in failing to see that a general definition of reality can be given only in functional terms.] **I. Husik.** 'Averroes on the Metaphysics of Aristotle.' [After a brief sketch of the works of Averroes, and a notice of the extant sources (in which the superiority of a Hebrew to a Latin translation from the Arabic is maintained), the author gives a running analysis of the contents of the compendium of Aristotle's *Metaphysics*. The study is based on the Arabic text of the Cairo edition, which became available two years ago, upon a copy of the Hebrew translation made from seven MSS. and upon the Latin translation (Venice, 1573). Averroes was the best Aristotelian expositor of his time, and is still to be regarded as one of the sources of mediæval philosophy.] *Reviews of Books. Notices of New Books. Summaries of Articles. Notes.*



PSYCHOLOGICAL REVIEW. Vol. xvi., No. 4. H. A. Carr. 'Visual Illusions of Depth.' [Illusions of depth are rarely mentioned in the literature. In a body of 350 college students, the writer found 58 persons who had, at some time of their lives, experienced such illusions; the present paper deals with 48 cases in which the illusions occurred only involuntarily. They are of four types: illusions of pure distance, of pure motion, of movement involving change of position, and of pure distance complicated by movement involving change of position. Their specific features, together with the objective and subjective conditions of appearance, are worked out in such detail as the memory of the observers allowed. In explanation, the writer lays the greatest stress upon binocular parallax; lenticular changes and changes of intensity of light play a considerable part; convergence is less effective, and the contraction of the visual field is of doubtful validity as a causal factor. He admits the possibility of other, objective and subjective conditions. The explanation in terms of binocular parallax implies that unitary vision may result from the stimulation of non-corresponding retinal areas, and that this unusual unitary combination involves an unusual localisation in the third dimension. Such an hypothesis is defensible; the author, however, rejects the current statement of it in motor terms, and substitutes for the motor theory two assumptions: that the position of monocular images along the line of sight is variable, and that certain of the determining conditions of this variability are central.] J. E. Downey. 'Muscle-Reading: a Method of Investigating Involuntary Movements and Mental Types.' [The writer, who is a skilled amateur mind-reader, undertook an experimental study of the subject with a view to the discrimination of mental types. After a brief review of the history of muscle-reading, she formulates three special problems, and reports the results obtained. (1) Does scepticism as to the outcome of the tests, or hostility towards the operator's claims, or knowledge of his *modus operandi*, serve to inhibit the involuntary movements of the guide? Success is often, and at times very easily achieved with sceptical guides, while failure (due to lack of concentrated attention) may occur even with highly suggestible guides. On the whole, the difficult guides are those who assume a critical attitude during the experiment. Wrong direction of attention, physiological dishonesty, may be as indicative as physiological candour. The whole subject is complicated by the extraordinary difficulty of bringing the involuntary movements to the focus of consciousness. (2) What relation obtains between the mode of mental control exercised by the guide, in his effort to concentrate attention and the success of the experiment? Guides with strong motor impulse indicate the direction of attention by motor initiative; this is retarded, though often made more precise, by concentration on the direction of movement. Guides with less strong motor impulse often weaken in attention during the test; a shift of attention to direction of movement then increases the impulse. Verbal control produces in general a freer and less accurate initiative than visual control. (3) How is success possible with distracted attention? The 'mental set' may reveal itself automatically even when attention is roving or is concentrated upon some foreign object. On the main issue, of mental types, the experiments revealed differences of impulsiveness, of volitional tendency, of bodily orientation, of perseverative tendencies, and of imagery.] Announcement.

AMERICAN JOURNAL OF PSYCHOLOGY. Vol. xx., No. 3. H. Ellis. 'Sexual Education and Nakedness.' [After a brief review of the historical conceptions of nakedness, natural, sensual, conventional, the

paper sets forth the three possible influences of its cultivation at the present day. It is an important element in the sexual hygiene of the young, replacing prurieny by incurious knowledge; its effect on the adult is to cultivate the sense of beauty; and the custom of nakedness, at least in its inception, affects morals by substituting positive and dynamic psychological factors for timidity and a merely negative attitude.] **C. Guillet.** 'Retentiveness in Child and Adult.' [Comparison of memorisation and retentiveness in a two-and-a-half years old child (coloured pictures, English, French and German names) and an adult (pictures and Japanese names). The adult has the advantage. Thus, in learning lists of some 50 names of animals, the child added 2.33, the adult 4.35 at each repetition to his store of memorised words; the child retained 33 per cent. and the adult 71 per cent. after a six weeks' interval; after the same interval, when both retained about one-third of the total number, the adult relearned in one-third of the number of repetitions required by the child. It appears that the adult, from power of attention and wider linguistic experience, should learn a foreign language faster and remember it better than the child. Other tentative conclusions, pedagogical and psychological, are drawn from the results.] **F. L. Wells.** 'Sex Differences in the Tapping Test; an Interpretation.' [No difference appears in absolute rate of tapping, in gross fatigue loss during the 30 sec. period, or in the form of the curve of this loss. Differences appear, however, in those features of the experiment in which the affective factor is involved. Thus, women surpass men in the parts of the work subject to special *Antriebe*; they report with greater objective accuracy their sensations of fatigue; they show a tendency to relatively increasing variability under fatigue, etc. The differences are thus not fundamentally sexual, but are secondary to certain differences in temperament.] **E. L. Thorndike.** 'The Relation of Accuracy in Sensory Discrimination to General Intelligence.' [Spearman found an approximately absolute correlation between general discrimination and general intelligence. In the present experiments, the correlation between whatever is common to drawing lines accurately and to equating weights and whatever is common to intellect as judged by fellow-students and intellect as judged by teachers is not 1.00, but 0.26 or 0.15, according to the Spearman formula used; the most probable relation between the factor common to all sensory discriminations and the factor common to intellect judged by students and teachers' estimates and by school marks is but 0.23. It appears that, with young children, a test designed to measure discrimination may in reality measure ability to understand instructions.] **J. H. Leuba.** 'An Apparatus for the Study of Kinesthetic Space Perception.' [Figure and description of apparatus for arc movements, i.e., movements involving but one joint and the muscles operating it.] **J. H. Leuba and E. Chamberlain.** 'The Influence of the Duration and of the Rate of Arm Movements upon the Judgment of their Length.' [If the sense of position is excluded, the relative length of arc movements is judged by comparison of the duration of sensations (preferably articular) arising from movement and a particular value (rate value) of the articular sensations; a quasi-automatic compensatory relation exists between duration and rate value. The results do not necessitate the hypothesis of local signs in articular sensation.] **E. Murray.** 'Organic Sensation.' [After outlining the primary problems of a psychology of organic sensation (the possibility of reliable observation, the existence of any organic sensation other than pain, the question of plurality of qualities), the author reviews in detail the anatomical and histological, the physiological, and the clinical and pathological evidence in the case. She then reports experiments on organic attitudes, rever-

berations and concomitant sensations; on the direct effects of external and internal stimulation; on the terms 'sharp' and 'dull'; and on indifferent pains. The differentiation of external and internal sensation, and the conditions of reference, turn out to be more complex than is usually thought; many internally referred sensations arise from the excitation of cutaneous nerves. The texture or massing of sensation is as important in the production of apparent qualitative difference as is the elemental quality itself; internal may thus differ from external sensations rather texturally than qualitatively (*cf.* tickle and pressure). That the pain continuum begins indifferently is of great importance for a psychology of organic sensation at large.] Notes from the Psychological Laboratory of Vassar College. **K. B. Rose.** 'I. Some Statistics of Synaesthesia.' [Of 250 college students, 9 per cent. showed colour and 12 per cent. form associations of various kinds.] **M. F. Washburn.** 'II. An Instance of the Effect of Verbal Suggestion on Tactual Space Perception.' [Striking effect of suggestive instruction in aesthesiometrical work.] **A. M. Batty.** 'Some Observations upon Practice and Fatigue as they Affect the Rate of Tapping.' [With five sec. trials, rest periods of 5, 10 and 20 sec. are favourable to practice-gain in that order, though favourable to work in the inverse order. Practice-gain thus proceeds in proportion to fatigue; one must work to the maximum in order to gain the most profit by practice.] Psychological Literature, Notes.

JOURNAL OF PHILOSOPHY, PSYCHOLOGY AND SCIENTIFIC METHODS. vi., 12. **F. C. Doan.** 'The Cosmic Character.' [Continues article in vi., 3, postulating a 'cosmic sanity' which controls the development of the subconscious first cause to the 'personal animal' whom religious experience demands.] **D. Fisher.** 'Common Sense and Attitudes.' [On the common-sense level all can agree, but beyond it lies the region where philosophers disagree, that of ineffable personal attitudes.]—vi., 13. **Y. R. Dodson.** 'An Interpretation of the St. Louis Philosophical Movement.' [H. C. Brockmeyer, W. T. Harris, T. Davidson, G. H. Howison, etc. Suggests that the success of these men was due to the fact that their philosophy impelled them to make the necessary compromises with politicians, etc.] **J. W. Hudson.** 'Hegel's Conception of an Introduction to Philosophy.' [In view of the danger that philosophy may be becoming popular desiderates an introduction on the lines of the *Phenomenology of Spirit*.] **E. H. Rowland.** 'A Case of Visual Sensations during Sleep.' [By a lady who sleeps with her eyes open and consequently peoples her bedroom with dream images which it is hard to discriminate from realities.]—vi., 14. **A. E. Davies.** 'Education and Philosophy.' [Thinks that American philosophers have neglected the study of logic.] **J. E. Russell.** 'Why not Pluralism?' [Criticism of A. E. Taylor's argument against pluralism, concluding that pluralism remains a theoretically admissible doctrine.] **A. W. Moore.** 'Pragmatism and Solipsism.' [Replies to the charge of solipsism brought in Pratt's *What is Pragmatism?* Pragmatism has, it would seem prematurely, taken it for granted that consciousness is "born of a thoroughly social, objective world" and thinks of it as "always a function of the whole social situation".]—vi., 15. **W. T. Bush.** 'Knowledge and Perception.' [Even though "metaphysicians have not yet ceased to imagine a reality in which the calm of self-identity leaves no place for the genesis of consequences," "knowledge of nature is skill in reading the signs of nature, and a point of view which is unable to treat immediacy as the sign of causality can provide no basis for a theory of knowledge".] **G. M. Fernald.** 'The Phenomena of Peripheral Vision as Affected by Chromatic and Achromatic Adaptation.' [Reply to Titchener's criticism of a 'paradoxical after-image' in the

author's experiments.] Ninth Meeting of the Western Philosophical Association. In a review of G. L. Dickinson's *Is Immortality Desirable?* Prof. Santayana gives his reasons for answering No.—vi., 16. **T. L. Bolton.** 'On the Efficacy of Consciousness.' [Infers from psychological introspection that "the chief characteristic of mind" is "the power to represent things that are not present and to act upon them just as if they were". For thus animals "may learn to act with perfect automatism upon things in their absence" so that when needed "the appropriate act is there". This function has great survival value.] **J. Dewey.** 'The Dilemma of the Intellectualist Theory of Truth.' Argues that the intellectualist is usually "an anarchistic subjectivist," because he makes truth "a self-contained property of ideas" and so only an internal property of an idea *qua* idea.] **A. Schinz.** 'Reply to Prof. Moore's Criticism of "Antipragmatisme".' [Cf. vi., 11.]

THE SOCIOLOGICAL REVIEW. Vol. ii., No. 3, July, 1909. **Gilbert Murray.** 'Wherewith shall it be salted? A University Address.' [Intellect that is not in bondage, whether to the rich or whatever it may be, is the great hope of the world. The importance in this connexion of the new universities. Consideration of the questions these emancipated intellectuals must face, having a view solely to the public interest.] Discussions: 'A Proposed Sociological Record.' **F. Carrel** and **Prof. Geddes.** 'The Present Position of Positivism.' **S. H. Swinny.** Notes, Reviews, etc.

REVUE NÉO-SCOLASTIQUE. Août, 1909. **C. Piat.** 'Sanctions.' [Hopelessness of Determinism as exclusive of the sanctions of a world to come. How the neglect of such sanctions is working in France.] **H. Hoffmans.** 'Roger Bacon: Mystic Intuition and Science.' [Bacon's assertion that the Active Intellect is distinct from the human mind, and is primarily God, secondarily the Angels. How he differs from Averroes.] **C. Alibert.** 'Psychological Reading of Saints' Lives.' [What elements of soul are strengthened by sanctity, and what weakened.] **J. Halleux.** 'Critique of M. Guibert's *Les croyances religieuses et les sciences naturelles*.' [Does the degradation of energy show that Nature must have had a beginning and will have an end? Does the origin of life postulate a Creator? Is Evolution incompetent to issue in an animal body fit to be informed by a rational soul?]

REVUE DE PHILOSOPHIE. 1<sup>er</sup> Juillet, 1909. **F. Blanche.** 'The Notion of Truth in Pragmatism.' ["Is it not possible that the verification may gradually make the primitive relation pass to a new state? If that is so, truth will certainly be a phenomenon, and the pragmatist will be right. Let us look into this point closely." A negative answer is arrived at.] **Domet de Vorges.** 'From Kant to St. Thomas.' [Argues that the attempt made by M. Fonsegrive in this Review to reconcile the two is a failure.] **G. Sortais.** 'Nature of Inductive Syllogism.' ["In the employment of the inductive method the passage from particular to general is anterior to the experiment set on foot. Before the physicist succeeds in establishing a true causal relation, he has to multiply his operations. But as soon as a true causal relation has been duly verified, it is instinctively extended to all possible cases of the same sort."] **A. Wessels.** 'Free Will and the Phenomena of Automatism.' [Hypnotism an abnormal state in which the conditions of free will are absent.] **M. Baelen.** 'The Monist Mechanism of Taine.' **C. Berthet.** Review of Mgr. Le Roy, *La Religion des Primitifs*, Beauchesne, Paris. [The observations of a

missionary bishop, twenty years in Africa.]—1<sup>er</sup> Août, 1909. **N. Vaschide** and **R. Meunier**. 'Theories of Attention.' ["Attention is not an artificial phenomenon, but the most universal of the functions of our mental life. It is essentially dynamical; it is to intelligence what reflex irritability is to the nervous system. It is not a state, it is an act."] **R. Saleilles**. 'The Origin of Right and Duty.' [An admirable Address, exposes the subjectivist view of Rousseau, the historical of Savigny and Ihering, and the positivist. "Where there is no longer any subjective right, there is no longer any right at all. If I can no longer say *my right*, if I must say *I have a function which society imposes on me, and which depends solely on the tyranny of social evolution*, I am then nothing more than an atom of that devouring organism for which I live and for which I labour, society. I am no longer an individual, no longer a person. There may be rights in the world, but there is no right left for the individual."] **P. Duhem**. 'When did Latin Scholasticism come to know the Physics of Aristotle?' ["Before the thirteenth century the Physics and Meta-physics of Aristotle were little known to the Latins, though it would be rash to conclude that they were totally unknown."] **J. Louis**. 'Matter, Understanding, and Reason in the Philosophy of Schopenhauer.' **L. Couturat**, etc.

REVUE DE METAPHYSIQUE ET DE MORALE. No. 3, Mai, 1909. **L. Brunschvicg**. 'Une phase du développement de la pensée mathématique.' [Human thought approached the calculus along various paths. Consideration of the importance of the work of Archimedes, Cavalieri, Pascal and Leibniz, Newton, etc. No philosophical doctrine born of the calculus, although there are traces of such in the system of Leibniz. The close connexion of technical discovery and critical reflexion shows that history must arbitrate if there is to be a durable alliance between science and philosophy.] **E. Goblot**. 'Sur le syllogisme de la première figure.' [To prove that the Major Premiss is the expression of a constant relation.] Correspondence inédite de Ch. Renouvier et de Ch. Secrétan (*Suite*). **H. Berthelot**. 'Sur le pragmatisme de Nietzsche' (*Suite*). Études Critiques, Questions Pratiques, etc.—No. 4, Juillet, 1909. **H. Poincaré**. 'La logique de l'infini.' [An interesting and important article, critical of M. Zermelo, and, in a less degree, of Mr. Russell, who "has a better understanding of the difficulties to overcome". Mr. Poincaré himself adheres to the following rules: (1) Ne jamais envisager que des objets susceptibles d'être définis en un nombre fini de mots; (2) Ne jamais perdre de vue que toute proposition sur l'infini doit être la traduction, l'énoncé abrégé de propositions sur le fini; (3) Éviter les classifications et les définitions non-prédicatives.] **L. Dauriac**. 'Les sources néocriticistes de la dialectique synthétique dans l'Essai sur les Éléments principaux de la Représentation.' [Indebtedness of Hamelin to Renouvier.] Correspondence inédite de Ch. Renouvier et de Ch. Secrétan (*Suite*). Études Critiques. Discussions: 'A propos d'Augusto Sabatier,' **H. Monnier**. Questions Pratiques, etc., etc.

ARCHIVES DE PSYCHOLOGIE. Tome viii., No. 3. **La Direction des Archives**. 'Charles Darwin.' [General tribute to the work, biological and psychological, and to the character of Darwin.] **A. Lemaître**. 'Contribution à la psychologie de l'adolescent.—I. Le parapsychisme scolaire.—II. Nécéité ou utilité de la division de conscience.—III. L'évolution mentale d'un dégénéré supérieur.' [The first part of the paper describes eight cases of parapsychism, a term coined by the author for a certain type of psychasthenia. The developmental process begins with a latent physical crisis; then follows the parapsychical stage, result-

ing from an almost unconscious psychical crisis; and this again is succeeded by a conscious crisis, physical (tuberculosis, etc.) or mental (instability). In the second part, it is argued that a division of consciousness may, in certain cases, be advantageous, as preserving the individual against a greater evil. The third part sketches the history of a higher degenerate, with reference to Nordau's stigmata (mania of persecution, mania of philanthropy, megalomania, mysticism, erotomania).] **E. Yung.** 'Contribution à l'étude de la suggestibilité à l'état de veille.' [Experiments with objects viewed by the microscope, and with 'magnetised' cards and coins. Young students are easily brought to see diatoms, by suggestion, in an empty field; more practised observers are less suggestible, though they may be led to see structural details that are not present. Muscular, tactual, olfactory, visual and auditory hallucinations are easily produced, by suitable suggestion, in normal adults (83·8 per cent. of a total of 420, 69 per cent. of a total of 120).] Bibliographie. Notes diverses.—Tome viii., No. 4. **E. Claparède** et **W. Baaed.** 'Recherches expérimentales sur quelques processus psychiques simples dans un cas d'hypnose.' [A detailed study of certain mental processes, in the waking and hypnotic states, made for the most part upon a 'mediumistic' subject, a woman of forty-two. The paper opens with a description of the various stages of hypnosis (six in number) evidenced by the subject. Experiments are then described upon reaction, simple and compound, upon memory, upon association of ideas, and upon addition. A concluding section briefly reviews the principal theories of the hypnotic state, and discusses the experimental results in the light of these theories. The time of simple reaction is not modified by hypnosis in the case of the chief observer, though it is increased in that of another observer; the discrimination and association times are lengthened, the choice times slightly reduced. The memory experiments show clearly that the psychophysical basis of memory is identical in the two states; posthypnotic amnesia is an amnesia not of retention but of reproduction. The association experiments show that, while associative inhibition may be favoured by hypnosis, it does not constitute hypnosis; the ideational constellation is practically identical in the two states; hypnosis is not a reduction of the extent of the mental field. The essential characteristic of hypnosis appears to be a suspension of the function of initiative. The paper is written in a moderate and tentative way, and raises many questions (*e.g.*, that of suggestibility) which it does not attempt dogmatically to answer.] **Recueil de Faits: Documents et Discussions.** **A. Lemaître.** 'Paramnésie négative et paramnésie renversée.' [Case of negative paramnesia of articulation; the subject (a boy of fifteen) thinks that he has asked a question when in reality he has not spoken. Discussion of a case of paramnesia with reversal (already published) in the light of Janet's case of reversal of orientation or allochiria of ideas.] Bibliographie. Nécrologie. [Ernest Naville, Henri Zbinden.] Notes diverses.

**ZEITSCHRIFT FÜR PSYCHOLOGIE.** Bd. li., Heft 3 und 4. **H. Haenal.** 'Die Gestalt des Himmels und Vergrößerung der Gestirne am Horizonte; ein Versuch zur Lösung eines alten Problems.' [The author reviews the existing theories, and shows that observational data and explanations are alike at variance. The question of the apparent size of the moon on the horizon is, without doubt, closely connected with that of the apparent form of the heavens. But the heavens consist, visually, of two parts: a vertical ring of varying height at the horizon, which is seen (like the terrestrial horizon) at a determinate distance; and a formless area, above this ring, which (like the field of the closed eyes) is seen merely as a colour of essentially indeterminate distance. Hence on the

horizon the heavenly bodies appear also at a kinæsthetically finite distance, while at the zenith they are, kinæsthetically, infinitely remote. In other words, their perception on the horizon depends both on visual magnitude and on distance, at the zenith on visual magnitude only. The moon on the horizon is seen in perspective; not as a terrestrial object, but under the same laws of vision as the terrestrial objects at that finite distance; it therefore appears large. When we look to the zenith, we unconsciously change our standard; the moon occupies a fractional part of the total field, and is therefore seen in its normal or actual smallness. This view enables us to understand the discrepancies in the recorded observations.] **R. F. Pozdena.** 'Eine Methode zur experimentellen und konstruktiven Bestimmung der Form des Firmaments.' [In sharp contrast to the author of the preceding paper, the writer thinks it possible, by a combination of observation with logical inferences leading to the formulation of a mathematical problem, to obtain determinants which shall enable him to draw a smooth curve, solely by the aid of mathematics or of geometrical construction, whose rotation about a vertical axis shall give the apparent form of the heavens for any special case. His initial assumptions are only that the diameter of the moon on the horizon is larger than that at the zenith; and that the straight line from observer to horizon is longer than that from observer to zenith. He describes an apparatus for the determination of the apparent magnitudes of the moon at different heights in the sky, and illustrates, by reference to his own observations, the simplest mode of mathematical treatment of the data.] **K. Groos.** 'Untersuchungen über den Aufbau der Systeme, II.' [The paper cites a number of instances of antithesis; a psychological discussion is promised for a later paper. In the pre-Socratic period, we find a dualistic treatment of becoming, being and knowing. Antithesis is, however, most marked at the great turning-points of philosophy: in Plato (being and knowing), Descartes (physical and psychical) and Kant (sensibility and understanding, world of experience and thing-in-itself).] **P. Kohnstamm.** 'Parallelismus und Wechselwirkung vom Standpunkte der mathematischen Physik.' [Mathematical analysis of the theory of interaction shows that it leads of necessity to one or other of the following three consequences. (1) We must believe that not all movements in nature are subject to law (indeterminism). (2) Or we must believe that the psychical is at every moment univocally determined by the physical, whereas the physical runs its course as if the psychical did not exist. (3) Or finally we must believe that the psychical knows no more than the physical of a beginning and an end. Whether any one of these beliefs is correct can be decided only in the light of a much more extended factual knowledge than we now possess.] *Besprechung.* [K. Bühler on J. van Ginneken, *Principes de linguistique psychologique.*] *Literaturbericht.*

ZEITSCHRIFT FÜR PHILOSOPHIE UND PHILOSOPHISCHE KRITIK. Bd. cxxv., Heft 1, 1909. **Kristian B. R. Aars.** 'Pragmatismus und Empirismus.' [A deplorable uncertainty still prevails as to what Pragmatism really means. Is it a new estimate of the value of knowledge (and religion), or does it involve a new interpretation of truth itself, reducing true belief to something that conduces to life? Rationalism and commonsense must alike reject the theory implied by the second of these definitions. But there seems to be a general agreement that truth is useful. And this implies an utter rejection of the psycho-physical parallelism once so much in vogue. For mind could not act on matter if it were a mere epiphenomenon. Throughout this article the American and English Pragmatists are curiously ignored, all the references being to German, French and Italian writers.] **Richard Kroner.** 'Über logische



und ästhetische Allgemeingültigkeit.' [Continuing the investigation begun in the preceding number, Kroner, who writes as a follower of Prof. Rickert, gives us a searching criticism of Kant's epistemology. In the *Critique of Pure Reason* absolute universality is exhibited as the criterion of necessary or objective truth. Now there are two senses in which universality may be understood. A judgment may be valid for all knowing subjects without collecting the votes, or it may be valid for all the objects known without collecting the cases. Kant never properly discriminated between them and was led into various inconsistencies and difficulties by his confusion of thought. Kroner for his part holds that the question, How are synthetic judgments *a priori* possible? has been settled by Rickert's idea of introducing something very like a feeling of moral obligation into logic.] **W. Kinkel.** 'I. Bericht über Erscheinungen aus dem Gebiete der Ethik und Religionsphilosophie.' [Among several works passed in review the most complete approval seems given to *Il Problema del Bene* by Camillo Trivero.] Rezensionen, etc.—Bd. cxxxv., Heft 2, 1909. **H. Aschkenasy.** 'Voluntaristische Versuche in der Religionspsychologie.' [Deals with the psychological explanations of religion put forward by Nietzsche and Ebbinghaus. In his youthful work on the Origin of Tragedy Nietzsche interpreted the gods of Hellas as illusions created by the will to free itself from the anguish of life. In his later period, after discarding pessimism, he explained asceticism as the will for power turned back on itself in default of an opportunity for exercising itself on others. To Ebbinghaus on the other hand religion is a refuge from the impenetrable darkness of the future and the irresistible superiority of hostile powers. But this, as Aschkenasy observes, is not applicable to the higher forms of religion. And more generally, it betrays an inadequate conception of religion to treat it as a mere adaptation to vital needs, ignoring the metaphysical side of its doctrines.] **Karl Neuhaus.** 'Humes Lehre von den Prinzipien der Ethik.' [Hume's theory of causation breaks down when it is used to explain the mechanism of mind. Motivation is not concerned with the ultimate ends of action but with the means for attaining them. Not pleasurable feelings but objective ideals form the moral end. And reason does not, as Hume holds, stand neutral in the conflict of passions but declares some feelings to be more rational than others.] **Meta Jörges.** 'Geschlecht und Character.' [Otto Weiniger's brutally contemptuous estimate of women is inconsistent with his own philosophy of sex, according to which the male and female characteristics are never exhibited in their ideal purity.] **Richard Kroner.** 'Über logische und ästhetische Allgemeingültigkeit (Schluss).' [The writer continues to develop his own views under the form of a polemic against Kant, whose *Kritik der Urteilskraft* is here subjected to a searching examination. The teleological portions of that treatise in particular are shown to throw no light on the aesthetic problem. And the criterion of universality, already ousted from logical obligation, seems to have even less relevance as a note of aesthetic judgments, these being essentially individual, though recognised as binding on others besides the judge. But while general rules may be laid down *a priori* for determining the conditions of knowledge, no such rules are possible in the world of beauty. 'Here the question must in each instance be decided by artistic genius.'] Rezensionen, etc.—Bd. cxxxvi., Heft 1, 1909. **Arthur Liebert.** 'Der Anthropomorphismus der Wissenschaft.' [It is the boast of modern science to construct a complete and disinterested view of reality without any admixture of human elements. But the philosophy of cognition goes to dispel this conceit. The development from Protagoras and Democritus to Locke and Kant proves how much of what we call knowledge is due to the

knowing subject. Nor is the subjective element, as Kant thought, merely formal: it helps to constitute the matter of knowledge also. Nevertheless what we know is, in a sense, real, and its reality is assumed in every epistemological argument—an antinomy which Liebert does not seem to clear up.] **Otto Meyerhoff.** 'Erkenntnisstheorie und Vernunftkritik.' [The object of this writer has been, in association with Leonard Nelson, to revive the philosophy of Fries. His present purpose is to defend the original method of Fries as well as its recent developments against the criticisms of Cassirer.] **Georg Mehlis.** 'Über Kants Urteilsystematik.' [Mehlis seems to be, like Kroner, a disciple of Rickert, and his paper may be looked on as a contribution to the general revolt against Kant's criticism, while his concluding observations on Kant's neglect of the category of Quality and the important place given to it by Hegel, taken in company with other indications, point towards a revival of Hegelianism in Germany.] Rezensionen, etc.

ARCHIV FÜR SYSTEMATISCHE PHILOSOPHIE. Band xv., Heft 3. **G. Seliber.** 'Der Pragmatismus und seine Gegner auf den iii. Internationalen Kongress für Philosophie.' [The philosophy of Bergson gives a deeper analysis than Pragmatism, and does not attempt to elucidate epistemological problems by means of metaphysical speculations.] **Richard Müller-Freienfels.** 'Das Urteil in der Kunst.' [Careful discussion of Judgment as a factor in aesthetic enjoyment, its biological significance, its objectivity, the force of originality as a principle of value, the possibility of a normative Aesthetics, etc.] **Martin Meyer.** 'Wahrheit.' **Otto Neurath.** 'Eindeutigkeit und Kommutativität des logischen Produktes *a b*.' **Olga Hahn.** 'Zur Axiomatik des logischen Gebietskalküls.' **Otto Braun.** 'Rudolf Euckens Methode.' [Eucken investigates the activity of man as a creator of culture seeking to pierce to world principles beneath the psychical forces conditioning his activity.] **Paul C. Franze.** 'Eine entwicklungs-theoretische Betrachtung über das Verhältnis von Wissen und Glauben.' [Modern man shows his high development by insisting on a higher degree of evidence than used to satisfy in Philosophy and Religion.] **B. Lemcke.** 'De Potentia.' [Investigates the relation of force and cause.] **Kurt Geissler.** 'Wer darf in philosophischen Fragen urteilen?' [Rather tells us who ought not.] **H. Aschkenasy.** 'Zur Kritik des Relativismus in der Erkenntnistheorie.' **Georg Wendel.** 'Das Problem der Kausalität und der Freiheit.' Neueste Erscheinungen, etc.

ARCHIV FÜR DIE GESAMTE PSYCHOLOGIE. Bd. xiv., Heft 3 und 4. **W. Wirth.** 'Die Probleme der Psychologischen Studien von Theodor Lipps.' [A detailed comparison of the two editions, 1885 and 1905, of Lipps' *Psychologische Studien*, with critical and constructive comment. (1) On psychical magnitudes, their absolute and relative estimation, and Weber's Law for differential limens. Discusses Lipps' change from the psychophysical to the psychological interpretation of Weber's Law; his doctrine of impression; his relations to Fechner and Wundt; his appeal to unconscious psychical processes. Emphasises the difference between the significance of Weber's Law for the discovery of relatively equal distances and its significance for the differential limens. (2) The theory of unconscious tonal rhythms. An estimate of Lipps' theory, mainly in the light of Krueger's results with difference-tones. (3) The genetic explanation of visual space-perception, with especial reference to the theory of adaptation. Critique of Lipps' view, written mainly from the Wundtian standpoint.] **E. Meumann.** 'Weiteres zur Frage der Sensibilität der inneren Organe und der Bedeutung der Organempfindungen, i.' [Ac-

count of Becher's experiments, with running commentary. The author finds evidence for the sensitivity of stomach, intestine, heart and lungs; he relies upon his own introspections, upon the reported pathological cases, upon recent physiological observations, and upon a reinterpretation of the counter-evidence from surgery (spread of anæsthetic in Lennander's work).] **E. Trebs.** 'Die Harmonie der Vokale.' [Discusses those reduplicated forms (the writer terms them 'variations') in which there is shift of a vowel (as in tick-tock) or a consonant (as in helter-skelter). A table gives all types of variation, known to the author, in sixty-one languages, with the exception of consonantal variations in the Romance languages; the range is wide, but the sequences *u-a*, *a-u*, *i-a*, *a-i* are common, and the sequences *o-a*, *a-o*, *e-a*, *a-e* stand next in order of frequency. The vowels *u*, *o*, *e*, *y*, *i* in the principal word usually induce *a* in the secondary; *a* usually induces *i* or *u*. The variations apparently take shape under the most diverse conditions; but their development is based upon the musical principle of the octave-ratio of the resonance tones. This conclusion implies the correctness of Pipping's overtone determinations.] **P. Mueller.** 'Einige Beobachtungen über die sekundäre Erregung nach kurzer Reizung des Sehorgans.' [Survey of previous work and new observations. The dark streaks appear in the ghost, as well as in the primary image, and in both cases broaden towards the periphery; they are clearer and more numerous, the greater the rapidity and intensity of the stimulus. The appearance and time of entry of the ghost depend upon the intensity and duration of the stimulus and upon adaptation; its intensity is strictly correlated with the duration of the stimulus. The dark interval between primary and secondary images is longer in indirect than in direct observation, and decreases with increase of dark-adaptation. Complementary colours may appear in the primary image whatever form of stimulation is used (McDougal's slit, slit with graduated brightness, triangular aperture). White, red, green, blue, orange-yellow and violet lights were used; red gives, as second excitation, an image that in many respects resembles the ghost.] **M. Ponzo.** 'Über die Wirkung des Stovains auf die Organe des Geschmacks, der Hautempfindungen, des Geruchs und des Gehörs, nebst einigen weiteren Beobachtungen über die Wirkung des Kokains, des Alipins und der Karbolsäure im Gebiete der Empfindungen.' [Deals chiefly with the effects of stovaine (dimethylaminobenzoylpentanol hydrochloride). The peripheral effect of this substance upon taste is a local anæsthesia for salt and bitter (common salt and sulphate of quinine), its central effect is a hyperæsthesia apparently for salt only; the central effect of cocaine, on the contrary, is a hyperæsthesia for bitter and sweet (cane sugar). It seems, therefore, that the influence of the anæsthetics upon the nerve-centres is selective, and that there are separate brain-areas for the different sensory qualities. In the sphere of touch, stovaine produces, as peripheral effect, a local anæsthesia for pressure, pain and cold; centrally, it appears to render the pressure sense hyperæsthetic; whether it affects, from the centre, the pain and temperature senses is still to be determined. In smell, its peripheral effect is local anæsthesia for rubber and other odours; its central effect is hyperosmia. Finally, by action on the centre it heightens auditory acuity.] **T. Flournoy** and others. 'VI<sup>e</sup> Congrès int. de Psychologie, Geneve, 3-7 août 1909. Circulaire No. 2 (février 1909).' Literaturbericht. **E. Hirt.** 'Psychologisches in der psychiatrischen Literatur der letzten Jahre.' 'Einzelbesprechungen. [Wentseher on Meumann's *Intelligenz und Wille*; Landmann-Kalischer on Lipps' *Asthetik*, ii.] Referate.

## VIII.—NOTES.

### MIND ASSOCIATION.

The following is the full list of the officers and members of the Association:—

#### OFFICERS.

*President*—PROF. CARVETH READ.

*Vice-Presidents*—PROFS. B. BOSANQUET, T. CASE, J. H. MUIRHEAD,  
A. S. PRINGLE-PATTISON, W. R. SORLEY, J. SULLY, and  
J. WARD, DRs. S. H. HODGSON and H. RASHDALL.

*Editor*—PROF. G. F. STOUT.

*Treasurer*—DR. F. C. S. SCHILLER.

*Secretary*—MR. H. STURT.

*Guarantors*—MESSRS. A. J. BALFOUR and R. B. HALDANE, MRS.  
HENRY SIDGWICK and Dr. H. WILDE.

#### MEMBERS.

ALEXANDER (Prof. S.), The University, Manchester.

BAILLIE (Prof. J. B.), The University, Aberdeen.

BAIN (Mrs.), Ferryhill Lodge, Aberdeen. *Hon. Member.*

BALFOUR (Rt. Hon. A. J.), Whittingehame, Prestonkirk, N.B.

BALL (S.), St. John's House, St. Giles, Oxford.

BARKER (H.), Cairnmuir Rd., Corstorphine, Midlothian.

BEADNELL (Dr. C. M.), H.M.S. *King Alfred*, China Station.

BENECKE (E. C.), 182 Denmark Hill, S.E.

BENETT (W.), Oatlands, Warborough, Wallingford.

BENN (A. W.), Il Ciliegio, San Gervasio, Florence, Italy.

BERKELEY (Capt. H.), Melfort Cottage, Foxcombe Hill, Oxford.

BLUNT (H. W.), 183 Woodstock Road, Oxford.

BONAR (J.), The Mint, Ottawa, Canada.

BOSANQUET (Prof. B.), Heath Cottage, Oxshott, Surrey.

BOWMAN (A. A.), 26 Sutherland Street, Hillhead, Glasgow.

BRADLEY (F. H.), Merton College, Oxford.

BREN (Rev. R.), 44 George Road, Edgbaston, Birmingham.

BROUGH (Prof. J.), University College, Aberystwyth.

- BRYANT (Mrs. S.), 12 Gayton Crescent, N.W.  
BURNET (Prof. J.), The University, St. Andrews, N.B.  
BUSSELL (Rev. Dr. F. W.), Brasenose College, Oxford.  
CAMERON (Rev. J. R.), 88 Albert Road, Queen's Park, Glasgow.  
CARLILE (W.), Hailie, Lipscomb, Surrey.  
CARPENTER (Rev. Dr. J. E.), 11 Marston Ferry Road, Oxford.  
CARR (H. W.), Bury, Pulborough, Sussex.  
CASE (Prof. T.), Corpus Christi College, Oxford.  
CODDINGTON (F. J. O.), Training College, Sheffield.  
COIT (Dr. S.), 30 Hyde Park Gate, S.W.  
COOKE (H. P.), Armstrong College, Newcastle-on-Tyne.  
DAKYNS (J. R.), Snowdon View, Beddgelert, N. Wales.  
DAVIDSON (Prof. W. L.), 8 Queen's Gardens, Aberdeen.  
DESSOULAVY (Rev. Dr. C.), Pennybridge, Mayfield, Sussex.  
DIXON (Capt. E. T.), Racketts, Hythe, Hants.  
DOUGLAS (C. M.), Auchlochan, Lesmahagow, Lanarkshire.  
ELIOT (Sir C.N.E.), K.C.M.G., Endcliffe Holt, Endcliffe Crescent, Sheffield.  
FAIRBROTHER (W. H.), Trusley Cottage, Totland Bay, I.W.  
FARQUHARSON (A. S. L.), University College, Oxford.  
FORSYTH (Dr. T. M.), 4 Middlesshade, St. Andrews, N.B.  
FOSTON (Dr. H. M.), Hatherne, near Loughborough.  
FRASER (Prof. A. C.), Gorton House, Lasswade, Midlothian.  
FREMANTLE (H. E. S.), Bedwell Cottage, Rosebank, Capetown.  
GALLAGHER (Rev. J.), Crowton Vicarage, Northwich.  
GALLOWAY (Rev. G.), Manse of Kelton, Castle Douglas, N.B.  
GIBSON (Prof. J.), Bron Hwfa, Bangor.  
GIBSON (W. R. B.), 9 Briardale Gardens, Platt's Lane, N.W.  
GOLDSBOROUGH (Dr. G. F.), Church Side, Herne Hill, S.E.  
GRANGER (Prof. F.), University College, Nottingham.  
HALDANE (Rt. Hon. R. B.), M.P., 10 Old Square, Lincoln's Inn, W.C.  
HANDYSIDE (J.), 5 Hatton Place, Edinburgh.  
HARDIE (R. P.), 13 Palmerston Road, Edinburgh.  
HARRIS (Rev. W.), Badgworth, Axbridge, Somerset.  
HICKS (Prof. G. D.), 9 Cranmer Road, Cambridge.  
HODGSON (Dr. S. H.), 45 Conduit Street, W.  
HOERNLÉ (Prof. R. F. A.), South African College, Capetown.  
INGHAM (C. B.), Moira House, Eastbourne.  
JAMES (Rev. J. G.), The Manse, Christ Church, Enfield.  
JAMES (Prof. Wm.), 95 Irving Street, Cambridge, Mass., U.S.A.  
JENKINSON (A. J.), Brasenose College, Oxford.  
JEVONS (Dr. F. B.), Bishop Hatfield's Hall, Durham.  
JOACHIM (H. H.), Merton College, Oxford.  
JOHNSON (F. H.), c/o Brown & Shipley, 123 Pall Mall, S.W.  
JONES (Miss E. E. C.), Girton College, Cambridge.  
JONES (Prof. H.), 1 The College, Glasgow.  
JOSEPH (H. W. B.), New College, Oxford.  
KEYNES (Dr. J. N.), 6 Harvey Road, Cambridge.  
KNOX (Capt. H. V.), 3 Crick Road, Oxford.  
LATTA (Prof. R.), The University, Glasgow.

- LEIGH (E. C.), Caixa 147, Pernambuco, Brazil.  
 LINDSAY (A. D.), Balliol College, Oxford.  
 LOVEDAY (T.), 2 Moorgate Avenue, Sheffield.  
 McDUGGALL (W.), Woodsend, Foxcombe Hill, Oxford.  
 MCINTYRE (J. L.), Abbotsville, Cults, Aberdeenshire.  
 MACKENZIE (Prof. J. S.), Pendene, Llanishen, Cardiff.  
 MACKENZIE (W. L.), 1 Stirling Road, Trinity, Edinburgh.  
 MACKINTOSH (Prof. H. R.), 81 Colinton Road, Edinburgh.  
 MACMILLAN (Rev. R. A. C.), Manse, Prestwick, N.B.  
 McTAGGART (Dr. J. M. E.), Trinity College, Cambridge.  
 MARETT (R. R.), Westbury Lodge, Norham Road, Oxford.  
 MARSHALL (H. Rutgers), Century Assn., 7 West 43rd Street, New York.  
 MOBERLY (W. H.), Lincoln College, Oxford.  
 MOORE (G. E.), 6 Pembroke Villas, The Green, Richmond.  
 MORRISON (D.), Beethoven House, St. Andrews, N.B.  
 MORRISON (Rev. Dr. W. D.), 38 Devonshire Place, W.  
 MUIRHEAD (Prof. J. H.), 1 York Road, Edgbaston, Birmingham.  
 MURRAY (J.), Christ Church, Oxford.  
 MYERS (Dr. C. S.), Great Shelford, Cambridge.  
 OSGOOD (G. L.), 1 Rue Bellot, Geneva, Switzerland.  
 POLLOCK (Sir F.), Bart., 21 Hyde Park Place, London, W.  
 PRICHARD (H. A.), 43 Broad Street, Oxford.  
 PRINGLE-PATTISON (Prof. A. S.), The Haining, Selkirk, N.B.  
 RASHDALL (Rev. Dr. H.), 18 Long Wall, Oxford.  
 READ (Prof. C.), 111 Lansdowne Road, W.  
 RIVERS (W. H. R.), St. John's College, Cambridge.  
 ROBERTSON (Rev. Dr. J. M.), St. Ninian's, Stirling, N.B.  
 ROGERS (R. A. P.), Trinity College, Dublin.  
 ROSS (Dr. G. R. T.), Government College, Rangoon, India.  
 ROSS (W. D.), Oriel College, Oxford.  
 RUSSELL (Hon. B.), Bagley Wood, near Oxford.  
 SANDAY (Rev. Canon), Christ Church, Oxford.  
 SCHILLER (Dr. F. C. S.), Corpus Christi College, Oxford.  
 SCHWANN (Lady), 4 Prince's Gardens, W.  
 SCOTT (J. W.), Hallhill, Crossford, Carlisle, N.B.  
 SETH (Prof. J.), 3 Queen's Crescent, Edinburgh.  
 SHAND (A. F.), 1 Edwardes Place, W.  
 SHARGHA (Prof. I. K.), The College, Bareilly, N.W.P., India.  
 SHARPE (J. W.), Woodroffe, Portarlington Road, Bournemouth.  
 SHEARMAN (Dr. A. T.), 26 Flodden Road, S.E.  
 SIDGWICK (A.), Vellansagia, St. Buryan, R.S.O., Cornwall.  
 SIDGWICK (Mrs. H.), Newnham College, Cambridge. *Hon. Member.*  
 SMITH (J. A.), Balliol College, Oxford.  
 SMITH (Prof. Norman), Princeton University, N.J., U.S.A.  
 SMITH (T. O.), Oriel College, Oxford.  
 SORLEY (Prof. W. R.), St. Giles, Chesterton Lane, Cambridge.  
 SPENCER (C. N.), Walden, Tatsfield, Surrey.  
 STEWART (Dr. H. L.), 111 University Street, Belfast.  
 STEWART (Prof. J. A.), 14 Bradmore Road, Oxford.

- STOCKS (J. L.), St. John's College, Oxford.  
 STOKES (Prof. G. J.), Queen's College, Cork.  
 STOUT (Prof. G. F.), Craigard, St. Andrews, N.B. *Hon. Member.*  
 STRONG (Prof. C. A.), Columbia University, New York.  
 STURT (H.), 5 Park Terrace, Oxford.  
 SUBRAHMANYAM (Prof. A.), Presidency College, Madras.  
 SULLY (Prof. J.), 41 Ennerdale Road, Kew, S.W.  
 TEMPLE (W.), Queen's College, Oxford.  
 TERRELL (A. à B.), 15 Cranley Gardens, S.W.  
 TIRUMALACHARIAR (Prof. A. R.), Maharajah's College, Pudukotai, Trichinopoly, India.  
 TITCHENER (Prof. E. B.), Cornell University, Ithaca, N.Y., U.S.A. *Hon. Member.*  
 TUCKER (Miss A. W.), Newnham College, Cambridge.  
 UNDERHILL (G. E.), Magdalen College, Oxford.  
 WARD (Prof. J.), 6 Selwyn Gardens, Cambridge.  
 WARREN (Mrs. Fiske), 8 Mount Vernon Place, Boston, U.S.A.  
 WATERLOW (S. P.), Hill Side, Rye, Sussex.  
 WATT (W. A.), 183 St. Vincent Street, Glasgow.  
 WEBB (C. C. J.), Magdalen College, Oxford.  
 WELBY (Lady), Duneaves, Harrow.  
 WHITTAKER (T.), 11 Mornington Crescent, N.W.  
 WILLIAMS (Rev. H. H.), Hertford College, Oxford.  
 WILSON (Prof. J. Cook), 12 Fyfield Road, Oxford.  
 WOLF (Dr. A.), Stafford House, Gayton Road, Harrow.  
 WOODS (Miss A.), Maria Grey Coll., Salusbury Rd., Brondesbury, N.W.

Those who wish to join the Association should communicate with the Hon. Secretary, Mr. HENRY STURT, 5 Park Terrace, Oxford; or with the Hon. Treasurer, Dr. F. C. S. SCHILLER, Corpus Christi College, Oxford, to whom the yearly subscription of one guinea should be paid.

Members resident in U.S.A. may, if they choose, pay their subscription (\$5) into the account of the Treasurer (Dr. F. C. S. SCHILLER) at the Fifth Avenue Bank, corner of 44th Street, New York, U.S.A.

---

NOTE.

J'ai lu avec un haussement d'épaules les deux pages que M. C. C. J. Webb consacre, dans la dernière livraison du *Mind* (pp. 615-617) à un de mes ouvrages, traduit du français : *Scholasticism old and new*. Cette critique, dont le premier tiers est un hors d'œuvre, est le fait d'un *impressionniste*, pour qui les insinuations et les épithètes remplacent les arguments. — Penser donc ! Dans un ouvrage de caractère aussi général, M. Webb me reproche de ne pas donner l'étymologie du mot *Meta-*



*physics*.—Tout y *semble* (*seems*) de seconde main! Il conclut même—ce qui est plaisant—à l'infériorité de mon enseignement *oral*.—Et puis, continue-t-il, faut-il de la lourdeur d'idées (*slowness*), pour voir dans la philosophie scolastique "une synthèse commune à un groupe de docteurs occidentaux". Le compliment me met en bonne compagnie, puisque il s'adresse aussi au P. Ehrle de Rome et à Baeumker de Strasbourg.

Puis, voici qui est amusant : je n'ai pas compris la notion de scolastique, adopté par M. Picavet.—Celui-ci en rira autant que moi, puisqu'en maintes circonstances nous avons discuté la notion de la scolastique, mais en fournissant de part et d'autre . . . des raisons. M. Webb ignore-t-il cet échange de vues, poursuivi dans des revues et dans des livres? On peut-être ne nous a-t-il pas compris ni l'un ni l'autre? En ce cas, il retarde. Il retarde aussi, quand il se réfère au jugement (?) qu'il porta, il y a dix ans, sur un autre de mes ouvrages : *Histoire de la Philosophie médiévale* (1900), car depuis lors d'eux autres éditions ont paru de cet ouvrage : en 1905 à Paris (*Mind*, 1905, p. 558 et 559), en 1909 à Londres.

Il m'a semblé utile de signaler aux lecteurs pareils procédés de critique.

MAURICE DE WULF.

BRUXELLES, 14 Décembre 1909.